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GeoHydros, LLC
Specialized Geological Modeling
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Professional Background

GeoHydros LLC, Reno Nevada

2010 – Present

Managing Member, Group Leader, Hydrogeologist & Geological Modeler

Dr. Kincaid established GeoHydros, LLC in February 2010 with the same staff and office that operated from 1999-2007 as Hazlett-Kincaid, Inc. and from 2007-2010 as the Specialized Modeling Group within H2H Associates, LLC. Their current work is focused on groundwater and geologic modeling, and karst aquifer characterization. Current projects include: groundwater modeling and karst aquifer characterization for the Florida Geological Survey under contract to the University of West Florida, geological modeling for the U.S. Department of Energy at the Nevada Test Site in Nevada, as well as groundwater and geological modeling for several other environmental and engineering consulting companies. Dr. Kincaid's responsibilities include: scientific oversight of all modeling work, program development, business development, and financial oversight, as well as solids and parameter modeling, hydrogeological assessments, presentation development and delivery, and expert testimony.

H2H Associates LLC, Reno Nevada

2007 – 2010

Group Leader, Hydrogeologist & Geological Modeler

Dr. Kincaid merged Hazlett-Kincaid, Inc. and its staff of specialized modelers with H2H Associates of Troy New York in August 2007 in order to more effectively compete for government environmental contracts. In so doing, he established and led H2H's *Specialized Geological Modeling Group*, which was based in Reno, NV. Their work included projects for Coca-Cola, FL DEP, US DOD, ConocoPhillips, and Buzzi Unicem. Dr. Kincaid's responsibilities included: scientific oversight of all modeling work, program development, business development, and financial oversight, as well as solids and parameter modeling, hydrogeological assessments, presentation development and delivery, and expert testimony.

Hazlett-Kincaid Inc, Reno Nevada

1999 – 2007

Vice President / President, Hydrogeologist & Geological Modeler

Dr. Kincaid co-founded Hazlett-Kincaid, Inc. in 1999 recognizing a need in the environmental industry for modeling services that are more soundly based on accurate conceptualization and articulation of hydrogeologic complexities. He built a 4-person group of highly skilled professionals that focused on 3D solids modeling, visualization, and complex groundwater flow modeling in fractured and karst aquifers. Together they successfully completed projects for the NYC MTA, US DOD, US DOJ, PA DEP, FL DEP, FL DOT, Coca-Cola, Texaco, ConocoPhillips, Buzzi Unicem, and many other government and private entities. Through the work performed for those projects, his group established and maintained productive working relationships with some of the nations largest environmental and engineering firms including: ERM, Foster Wheeler, PB, STV, TetraTech, TriHydro, and WRS. He established two offices for the company in Akron, Pennsylvania and Reno, Nevada. His individual responsibilities included: scientific oversight of all modeling work, program development, business development, and financial oversight, as well as solids and parameter modeling, hydrogeological assessments, presentation development and delivery, and expert testimony. He assumed full control of the company in 2007 and merged it and his staff with H2H Associates LLC of Troy, New York.

Global Underwater Explorers (GUE), High Springs Florida

2000 – Present

Vice President / Board of Directors

Dr. Kincaid currently serves as *Vice President & Science Director* for this international non-profit organization whose goal is to protect sensitive underwater environments through exploration, research, and public education. Dr. Kincaid's work for GUE has focused on promoting cooperation and collaborations between private, government, and diving communities that contribute to protecting underwater environments. He has organized workshops, field trips, and seminars; regularly authors articles for trade journals; and is also responsible for developing financial support for continued research and education efforts. He currently leads the organizations primary conservation effort: *Project Baseline* (www.projectbaseline.org), which aims to empower divers to observe and record long term environmental conditions at diving sites around the world and share those observations with the public through a web-based geospatial database.

Wakulla Springs Alliance, Tallahassee, Florida**2002 – Present***Board of Directors - www.wakullaspringsalliance.org*

Dr. Kincaid currently serves on the Board of Directors for this non-profit organization whose goal is to improve the scientific understanding of karst and groundwater flow in the Floridan aquifer by promoting collaborative research and information exchange between private, academic, and government organizations. Dr. Kincaid's work has focused on developing and organizing workshops, field trips, and seminars for various government entities including State, County, and City regulatory and resource management agencies, and elected officials and their staffs. These include the Governor's Cabinet and the Florida DEP Secretary's Staff.

Southeastern Geological Society, Tallahassee Florida**2006 – 2010***Vice-President, President – www.segs.org*

As Vice President in 2007 and President in 2008-2009, Dr. Kincaid is responsible for developing field trips and promoting the non-profit organization's education and outreach objectives.

Woodward-Clyde Federal Services, Las Vegas, Nevada**1998***Geological Modeler*

Dr. Kincaid was primarily responsible for the development of an *alternate* 3-D geologic framework model of a 3.5 by 5 square-mile area of Yucca Mt., Nevada using EarthVision 4.0. The model consisted of 44 stratigraphic units and 18 fault blocks and required geologic interpretations of fault behavior at depth, bed dips, and lateral rock-unit thinning. The purpose of model was to evaluate QA/QC issues associated with solids and parameter modeling performed by different modelers.

University of Wyoming, Laramie, Wyoming**1994 – 1999***Graduate Assistant*

As part of his Ph.D. program, Dr. Kincaid worked under Drs Peter Huntoon and Neil Humphrey on the fractal nature of dissolution permeability in the carbonate aquifers of north Florida and southern Turkey. He used fractal, scaling relationships to develop a new conceptual model for karst conduit development in carbonate aquifers. He also developed a method for creating 3-D volumetric models of saturated cave morphologies from sparse survey data using custom designed computer programs and the EarthVision modeling software and investigated scale relationships in hydraulic conductivity data determined from various types of aquifer testing. Other responsibilities included the supervision of the Geology Department Research Computer Lab and assisting professors with the instruction of physical geology, hydrogeology, and field courses.

Project KarstDive, Antalya Turkey**1995 – 1996***Project Leader & Chief Scientist - <http://www.globalunderwaterexplorers.org/content/karstdive-95>*

Led a 12 member multi-national team that explored, mapped and documented saturated caves in the Taurus Mountain and Antalya Travertine aquifers of southern Turkey and developed a conceptual model for regional groundwater flow through those aquifers for the Turkish State Hydraulic Works. He successfully solicited funding for the project from various Turkish entities including: the International Research and Application Center for Karst Water Resources, the Turkish State Hydraulic Works, the Underwater Research Society, and Atlas Magazine; as well as from Lufthansa Airlines in Germany, and the National Speleological Society and the National Association for Cave Diving in the United States.

GeoSolutions, Inc., Gainesville, Florida**1992 – 1994***Hydrogeologist I*

Responsibilities included the preparation of Phase I and Contamination Assessment Reports; performance of site characterizations including the supervision of monitoring well installation, aquifer testing, ground water sampling, liquid level gauging, and elevation surveying; and database management.

University of Florida, Gainesville, Florida**1991 – 1993***Graduate Assistant*

Dr. Kincaid's M.S. research focused on the quantification of ground water/surface water interactions in the unconfined Floridan aquifer of the Western Santa Fe River Basin using a mass balance model and natural and deliberate tracers. Other responsibilities included the maintenance of a research lab containing a gas chromatograph and alpha-scintillation counters and assisting professors with the instruction of introductory geology, oceanography, mineralogy, and field courses.

Projects of Note

Florida Geologic Survey (Tallahassee, Florida)

Groundwater Tracing, Karst Aquifer Characterization & Modeling, Database Development, Public Education

Dr. Kincaid is a lead scientist and project manager for a multi-faceted karst aquifer characterization and public education effort in the Woodville Karst Plain of North Florida that is being funded jointly by the Florida Geological Survey and the Florida Department of Environmental Protection. As part of this effort, he has led a multi-year quantitative groundwater tracing program that has successfully established hydraulic connections between several sinking streams and the City of Tallahassee's wastewater spray field, and Wakulla Spring, which is one of the largest magnitude spring discharges in the world. He also manages the development of a comprehensive and interactive database for cave and hydraulic data (www.hazlett-kincaid.com/FGS/) and a basin-scale groundwater flow model designed to specifically simulate flow through mapped and traced karst conduits. In addition, he is part of a steering committee engaged in establishing a research observatory in the Woodville Karst Plain, and organizes public education programs that include workshops, short courses, field trips, and public presentations focusing on spring and aquifer protection.

Navarro-Intera, USDOE (Las Vegas, Nevada)

Geological Framework Modeling, Flow & Transport Modeling

Dr. Kincaid leads a group of scientists tasked with developing a set of geological framework models of the Nevada Test Site in support of the Department of Energy's effort to characterize the extent and magnitude of contamination resulting from historical underground nuclear testing. The models are created in EarthVision™. Modeled areas vary from 570 to 2700 km² and extend to depths of between 6500 and 9500 m. They simulate multiple extensional faults that offset approximately 60 different discontinuous and variably thick hydrostratigraphic units, including carbonates, lava flows, welded and non-welded tuffs, and alluvial sediments. His team has designed and implemented automated model development processes that allow rapid model revisions to address new data and interpretations received from other scientific teams, as well as a methodology for rapidly exporting the geological framework defined in EarthVision™ to flow modeling codes including FEHM and FEFLOW™. His team is also developing simulations for radionuclide transport through the carbonate hydrostratigraphic units.

Coca-Cola North America – Ginnie Springs (High Springs, Florida)

Groundwater Flow Modeling - www.geohydros.com/CCNA/

Dr. Kincaid led the development of a regional groundwater flow model that specifically simulates flow through mapped and traced conduits to numerous springs along the western Santa Fe River. The model identifies the impact of pumping by a water bottling facility on spring flows and defines well and spring vulnerabilities to local and regional water quality impacts based on travel times including nitrate loading due to intense agricultural operations and municipal wastewater disposal. The model was developed in FEFLOW™ and is the first of its kind to address conduit dominated groundwater flow and calibrate to measured and estimated spring discharges and tracer-defined conduit flow velocities as well as local and regional groundwater elevations. It has been shared with regional and State resource management agencies to promote more effective groundwater and spring protection measures.

Tetra Tech EC, USDOD (Philadelphia, Pennsylvania)

Geologic, Parameter, and Groundwater Flow Modeling

Dr. Kincaid led the development of a linked geological-groundwater flow model that simulates a 3D heterogeneous multi-aquifer system beneath the former Defense Supply Center Philadelphia (DSCP) facility in Philadelphia, Pennsylvania that has been impacted by more than two million gallons of light non-aqueous phase liquid (LNAPL). The effort involved the development of a regional and site-scale 3-D Geologic Framework Model (GFM) to evaluate the geospatial relationship between the LNAPL plume, various discontinuous soil and rock zones, and buried utilities. He co-developed a method for using the Van Genuchten equation and parameter grids extracted from the GFM to estimate total recoverable LNAPL on a synoptic basis. The model was constructed to provide a basis for simulating groundwater flow and benzene transport through the surficial aquifer and into a deep aquifer to support site closure under Pennsylvania Act 2 regulations. The work was performed for the US Department of Defense under sub-contract to Tetra Tech EC, Inc.

Hercules Stockertown Cement Quarry (Stockertown, Pennsylvania)

Groundwater Modeling/Quarry Dewatering

Dr. Kincaid led the development of a groundwater model in a heavily karstified and geologically complex terrain in northeast Pennsylvania. The project involved creating multiple solids and groundwater flow models and GIS coverages using the software FEFLOW™, EarthVision™ and ArcGIS™. The model successfully simulated the gross behavior of the water table in response to current dewatering activities at two quarries and interactions with an adjacent stream. Calibration variations were used to identify probable karstic flow paths and an estimated water budget for the quarry including contributions from preferential flow paths, most likely dissolutionally widened fractures that extend beyond the modeled area, and discharge water re-circulated along local karstic features. The resulting model and visualizations were instrumental in the client securing a permit for quarry expansion.

Metropolitan Transportation Authority - East Side Access Project (New York, New York)

Geologic, Parameter, Groundwater Flow, Fate & Transport Modeling

Dr. Kincaid developed a combined regional and site-scale 3D Geologic Framework Model (GFM) for the New York Metropolitan Transit Authority's East Side Access Project that delineated the spatial relationship between key geologic horizons, multiple sorbed-phase contaminant plumes, and various engineered features. The GFM was used as the framework for a numerical groundwater flow model from which his team developed mass transport models that simulated the movement of dissolved chlorinated volatile organic compounds through the complex geology and into or around large underground tunnel structures. Data generated from the respective process models was imported back into the GFM to develop visualizations and interpretations that were presented to project management (PB-STV Joint Venture), the New York DEC, and legal counsel.

Florida Department of Environmental Protection (Tallahassee, Florida)

Forensic DNAPL Modeling

Dr. Kincaid developed 3-D parameter models of the distribution of TCE, DCE, and the ratio DCE:TCE in the shallow subsurface at a contaminated site in Florida. The models showed the FDEP that the distribution of data points combined with grid and krigging parameters are critical factors in the interpretation of plume provenience and that earlier models that indicated multiple sources were likely biased by unrealistic model settings.

Expert Testimony / Litigation Support

Sand Hills Lake Rural Community Special Treatment Zone Administrative Hearing (telephone)	2011
Brown vs. Dept. of community Affairs and Bay County Florida: Case Nos. 10-0858GM	2010
Defense Supply Center Philadelphia; Department of Justice Litigation Meetings, Philadelphia PA	2003-2006
Wakulla Springs Water Bottling; Wakulla County Commission Meeting, Crawfordville FL	2006
Quail Ridge Farm Nutrient Management Plan; PA Environmental Hearing Board, Harrisburg PA	2003
Ben Lewis Farms; Thompson Township Supervisors – Development Hearing, Thompson Township, PA	2002
Gel-Bare Farms; North Heidelberg Township Development Hearing, North Heidelberg Township, PA	2002

Education

UNIVERSITY OF WYOMING, LARAMIE, WYOMING	1994 – 1999
<i>Ph.D. in GeoHydrology</i>	
<i>Dissertation: Morphologic & Fractal Characterization of Saturated Karstic Caves</i>	
UNIVERSITY OF FLORIDA, GAINESVILLE, FLORIDA	1987 – 1994
<i>M.S. in Hydrogeology</i>	1991 - 1994
<i>Thesis: Groundwater/Surface water interactions in the Western Santa Fe River Basin...</i>	
<i>B.S. in Geology</i>	1987 – 1991
U.S. AIR FORCE ACADEMY, COLORADO SPRINGS, COLORADO	1986 – 1987

Professional Associations & Awards

Global Underwater Explorers (www.que.com): Vice President, Board of Directors	2000 – Present
Hydrogeology Consortium (www.hydrogeologyconsortium.org): Steering Committee	2002 – Present
Southeastern Geological Society (www.segs.org): Vice President	2006 – Present
National Ground Water Association (www.ngwa.org): Member	2000 – Present
American Water Resources Association (www.awra.org): Member	2000 – Present
Geological Society of America (www.geosociety.org): Member	1991 – Present
- Distinguished Mentor	2004
National Speleological Society – Cave Diving Section (www.nsscds.com): Member	1989 – Present
- Science Award	2006
Florida Springs Protection Award (Florida Department of Environmental Protection)	2005

Technical Skills

Geologic Modeling & Data Visualization

- Solids and parameter modeling of 3-D stratigraphic horizons, geologic structures, and parameter distributions with the EarthVision[®] (Dynamic Graphics, Inc.) and TecPlot (Amtec Engineering)
- Development of computerized methods for fractal and geophysical analyses

Physical Hydrogeology and Computer Software Proficiency

- Aquifer test analysis, geologic and hydrogeologic mapping, aerial photograph interpretation, geochemical tracing, borehole geophysical interpretation, cave mapping and survey
- Adobe Photoshop, Illustrator, & Acrobat; Corel WordPerfect & Draw; Deneba Canvas; Macromedia Freehand, Fireworks, & Flash; MS Office & FrontPage; programming in Basic; Fortran; Matlab; HTML; Pascal

Technical Scuba Diving

- Certified Scuba Instructor (1988 – Present): NAUI, CMAS, NSS-CDS; Certified Cave Diver (1988 – Present): NACD, NSS-CDS, GUE; Certified Technical Diver (1990 – Present): GUE, IANTD; >1000 logged dives
- Notable Projects: Exploration of the Madison Blue Cave system Florida (maximum penetration >6000 ft – 1988 – 1990); Exploration of Manatee Cave System Florida (North American Record for longest cave penetration @ 11,100 feet – 1994); Project KarstDive, exploration of five cave systems in southern Turkey (record for deepest cave dive in Asia @ -420 ft – 1995); HMHS Britannic, exploration, survey, and documentation of shipwreck, -300 to -400 ft – 1999; Wakulla-Leon Sinks Cave System, instrumentation of cave passages for scientific study, -100 to -280 ft – 2001 – Present.

Peer Reviewed Articles

- Kincaid, T, Davies, G, Werner, C, and DeHan, R, 2012. Demonstrating interconnection between a wastewater application facility and a first magnitude spring in a karstic watershed: Tracer study of the Tallahassee, Florida Treated Effluent Spray Field, 2006-2007; Report of Investigations No. 111, Florida Geological Survey, Tallahassee, FL, 192 p.
- Kincaid, T.R. and Werner, C.L., 2008. Conduit flow paths and conduit/matrix interaction defined by quantitative groundwater tracing in the Floridan aquifer, in Yuhr, L.B., Alexander, E.C., and Beck, B.F. eds., *Sinkholes and the Engineering and Environmental Impacts of Karst*, Geotechnical Special Publication No. 33, American Society of Civil Engineers, Reston, VA, pp. 288-302.
- Loper, D.E., Werner, C.L., DeHan, R., Kincaid, T.R., Chicken, E., and Davies, G., 2008. Probing the plumbing of Wakulla Spring: instrumentation and preliminary results, in Yuhr, L.B., Alexander, E.C., and Beck, B.F. eds., *Sinkholes and the Engineering and Environmental Impacts of Karst*, Geotechnical Special Publication No. 33, American Society of Civil Engineers, Reston, VA, pp. 313-324.
- Meyer, B.A., Kincaid, T.R., and Hazlett, T.J., 2008. Modeling karstic controls on watershed-scale groundwater flow in the Floridan aquifer of north Florida, in Yuhr, L.B., Alexander, E.C., and Beck, B.F. eds., *Sinkholes and the Engineering and Environmental Impacts of Karst*, Geotechnical Special Publication No. 33, American Society of Civil Engineers, Reston, VA, pp. 351-361.

- Kincaid, T.R., 2007, Karst Hydrogeology of the Santa Fe River Basin, Fieldtrip Guidebook No. 47, Southeastern Geological Society, Tallahassee, FL. Available for download at: http://www.geohydros.com/images/Pubs/segs_fieldguide47_sfrb2007.pdf.
- Kincaid, T.R., 2006, Karst Hydrogeology of the Woodville Karst Plain: Wakulla & St. Marks River Basins, Field Trip Guidebook No. 46, Southeastern Geological Society, Tallahassee, FL.
- Kincaid, T.R., Hazlett, T.J., and Davies, G.J., 2005, Quantitative groundwater tracing and effective numerical modeling in karst: an example from the Woodville Karst Plain of North Florida: in Sinkholes and the Engineering and Environmental Impacts of Karst, Barry F. Beck ed., American Society of Civil Engineers, Reston, VA, p. 114-121. Available for download at: http://www.geohydros.com/images/Pubs/geohydros_groundwater_tracing_wkp_asce_Sep-2005.pdf.
- Loper, D.E., Werner, C.L., Chicken, E., Davies, G., and Kincaid, T., 2005, Coastal Carbonate Aquifer Sensitivity to Tides, *EOS, Transactions of the American Geophysical Union*, vol. 86, no. 39.
- Vilardi, C.V. and Kincaid, T.R., 2002, Design-Phase Geologic Framework Modeling for Large Construction Projects, Proceedings: Battelle Third International Conference on the Remediation of Chlorinated and Recalcitrant Compounds, Monterey, California.
- Kincaid, T.R. and Heffron, M., 2002, Database Design & Management for 3-D Hydrogeologic Modeling at the DOD DSCP Facility, Philadelphia, Pennsylvania, Proceedings: National Defense Industry Association Annual Meeting, Charleston, South Carolina.
- Kincaid, T.R., 2001, New Concepts for Groundwater Modeling in the Floridan Aquifer, Proceedings of the 65th Annual Meeting of the Florida Academy of Sciences Saint Leo, Florida; *Florida Scientist*, Vol 64, Supplement 1.
- Kincaid, T.R., 2000, Storage-Dominated vs Flow-Dominated Caves: A Hydraulic Model for Cave Development, Proceedings of the Underwater Science and Technology Meeting - SBT2000, December 2-3, 2000, Middle East Technical University, Ankara Turkey.
- Kincaid, T.R., 2000, Mapping and Modeling the Morphology of Underwater Caves in the Taurus Mountains and Antalya Travertine Plateau, Southern Turkey, Proceedings of the Underwater Science and Technology Meeting - SBT2000, December 2-3, 2000, Middle East Technical University, Ankara Turkey.
- Kincaid, T.R., 2000, Speleogenesis in the Kirkgozler Region of the Taurus Mountains, Southern Turkey, Proceedings of the Underwater Science and Technology Meeting - SBT2000, December 2-3, 2000, Middle East Technical University, Ankara Turkey.
- Kincaid, T.R., 2000, Three Dimensional Geometric Modeling and Visualization of Phreatic Karst Caves with Implications for Hydrologic and Geomorphic Studies, in: Sasowsky, I.D. and Wicks, C.M. (eds.), *Groundwater flow and contaminant transport in carbonate aquifers: A.A. Balkema, Rotterdam*, p.169-190.
- Kincaid, T.R., 1999, Morphologic and Fractal Characterization of Saturated Karstic Caves, Ph.D. Dissertation, University of Wyoming, 174 p.
- Kincaid, T.R., 1998, Rapid River Water Intrusion to the Unconfined Floridan Aquifer, *Environmental & Engineering Geoscience*, vol. 4, no. 3, College Station, Texas. Available for download at: http://www.geohydros.com/images/Pubs/EEG_1998_Kincaid_river_water_intrusion.pdf.
- Kincaid, T.R., 1997, Ground Water – Surface Water Exchange in the Unconfined Karstified Floridan Aquifer, *Karst Waters and Environmental Impacts*, Gultekin Gunay and Ivan Johnson (eds.), A.A. Balkema, Rotterdam, p. 405-412.
- Kincaid, T.R., 1994, Groundwater and Surface Water Interactions in the Western Santa Fe River Basin near High Springs, Florida. Master's Thesis, University of Florida

Abstracts & Posters

- Meyer, B.A. and Kincaid, T.R., 2012. Simulating Groundwater Flow Patterns in Quarry Vicinities Using Numerical Groundwater Flow Model. Program with Abstracts, Nevada Water Resources Association (NWRA) Annual Conference, Las Vegas, Nevada, March, 2012.

- Meyer, B.A. and Kincaid, T.R., 2012. Developing Regional Scale Hydrogeologic Conceptual Models. Program with Abstracts, Nevada Water Resources Association (NWRA) Annual Conference, Las Vegas, Nevada, March, 2012.
- Kincaid, T.R. and Meyer, B.A., 2011. A Numerical Model of Conduit Controlled Groundwater Flow in the Floridan aquifer. Program with Abstracts, NGWA Ground water Summit, Baltimore, Maryland, May 2011.
- Kincaid, T.R., Day, K.E., and Lamb, R., 2011. 3D Solids and Parameter Modeling to Facilitate Triad-Compliant Rapid Site Characterization. Program with Abstracts: The 2011 North American Environmental Field Conference & Exposition, San Diego, California, January 10-13, 2011.
- Kincaid, T.R., Davies, G.J., and Dyer, S.B., 2010. Tracing Reversing Groundwater Flows in the Coastal Floridan Aquifer. Poster Presentation. Geological Society of America Abstracts with Programs, Vol. 42, No. 5, p. 434. Available for download at:
http://www.geohydros.com/images/Pubs/geohydros_spring_creek_tracing_GSA_Oct-2010.pdf.
- Kincaid, T.R., Meyer, B.A., and Radtke, J., 2010. Modeling Karstic Controls on Watershed-Scale Groundwater Flow in the Floridan Aquifer of North Florida. 2nd UF Water Institute Symposium: Sustainable Water Resources – Complex Challenges, Integrated Solutions. The University of Florida and Progress Energy, Gainesville, Florida, February 24-25, 2010.
- Kincaid, T.R., Day, K.E., and Lamb, R., 2009. 3D Solids and Parameter Modeling to Facilitate Triad-Compliant Rapid Site Characterization. Proceedings of the 24th Central PA Geotechnical Conference, November 2-4, 2009, Hershey, Pennsylvania; and Transportation Research Board ADC60 Committee Waste Management & Resource Efficiency Summer Environmental Conference, New York City, July 13-15, 2009. Available for download at:
http://www.geohydros.com/images/Pubs/geohydros_3d_modeling_triad_ASCE_Nov-2009.pdf.
- Kincaid, T.R., and Werner, C.L., 2009. Hydraulic Characterization of Karst Aquifers through Quantitative Groundwater Tracing, Program with Abstracts, 5th Conference on Hydrogeology, Ecology, Monitoring, and Management of Ground Water in Karst Terrains, National Ground Water Association, Safety Harbor, Florida.
- Kincaid, T.R. and Meyer, B.A., 2009. Numerical Modeling in Karst Aquifers: Examples from Florida and Pennsylvania, Program with Abstracts, 5th Conference on Hydrogeology, Ecology, Monitoring, and Management of Ground Water in Karst Terrains, National Ground Water Association, Safety Harbor, Florida.
- Kincaid, T.R., Davies, G.J., Meyer, B.A., and Hazlett, T.J., 2007. Karst aquifer response to variations in distribution and magnitude of recharge and implications to land use planning in the Woodville Karst Plain of north Florida. Paper No: 175-10, GSA Abstracts with Programs Vol. 39, No. 6, p. 478.
- Kincaid, T.R., Davies, G.J., Hazlett, T.J., and Meyer, B.A., 2007. From research to results: mitigating the impact of sewage effluent on Wakulla Spring in north Florida. Paper No: 224-8, GSA Abstracts with Programs Vol. 39, No. 6, p. 602.
- Kincaid, T.R., and Davies, G.J., 2007. Quantitative tracing: a powerful tool for aquifer characterization and groundwater model development. Paper No: 221-1, GSA Abstracts with Programs Vol. 39, No. 6, p. 595.
- Kincaid, T.R., Davies, G.J., Hazlett, T.J., and Werner, C.L., 2007, Overflow Springs and Sinks and Competing Hydraulic Gradients in the Floridan Aquifer, Program with Abstracts, 4th Conference on Hydrogeology, Ecology, Monitoring, and Management of Ground Water in Karst Terrains, National Ground Water Association, Safety Harbor, Florida.
- Day, K.E. and Kincaid, T.R., 2007, A Web-Based Tool for Analytical Comparison of Hydrologic Data in the Woodville Karst Plain, Florida, Program with Abstracts, 4th Conference on Hydrogeology, Ecology, Monitoring, and Management of Ground Water in Karst Terrains, National Ground Water Association, Safety Harbor, Florida.
- Meyer, B.A., Kincaid, T.R., and Hazlett, T.J., 2007, A Method for Integrating Detailed Karst Feature Data into Ground Water Flow Models, Program with Abstracts, 4th Conference on Hydrogeology, Ecology, Monitoring, and Management of Ground Water in Karst Terrains, National Ground Water Association, Safety Harbor, Florida.

- Hazlett, T.J., Kincaid, T.R., and Meyer, B.A., 2007, A Numerical Groundwater Flow Model of the Woodville Karst Plain, Florida, Program with Abstracts, 4th Conference on Hydrogeology, Ecology, Monitoring, and Management of Ground Water in Karst Terrains, National Ground Water Association, Safety Harbor, Florida.
- Kincaid, T.R., Day, K.E., Hazlett, T.H., and Meyer, B.A., 2006, Characterizing Fractured Rock Aquifers through Geological Framework Modeling, Program with Abstracts, NGWA 2006 Focus Conference on Eastern Regional Ground Water Issues, Portland ME, Sep. 18-19, 2006.
- Hazlett, T.J., Kincaid, T.R., Meyer, B.A., and Day, K.E., 2006, Innovative Ground Water Supply Protection Modeling, Bucks County, Pennsylvania, Program with Abstracts, NGWA 2006 Focus Conference on Eastern Regional Ground Water Issues, Portland ME, Sep. 18-19, 2006.
- Kincaid, T.R., Hazlett, T.H., Day, K.E., and Meyer, B.A., 2006, Engineering Benefits of a Geological Framework Model, Program with Abstracts, Northeast Engineering Geology: from Till to Fill, 49th Annual Meeting, Association of Environmental and Engineering Geologists, Boston MA, Oct. 30 – Nov. 4, 2006.
- Kincaid, T. R., Davies, G. J., Hazlett, T. J., Loper, D., DeHan, R., and McKinlay, C., 2004, Groundbreaking characterization of the karstified Floridan aquifer in the Woodville Karst Plain of north Florida, Abstract No: 80344, GSA Abstracts with Programs Vol. 36, No. 5.
- Kincaid, T. R., Schmidt, W., Cook, S., Loper, D., Davies, G. J., and McKinlay, C., 2004, Collaborating for a Better Tomorrow: Research and Community Outreach Aimed at Protecting Wakulla Spring, Abstract No: 80391, GSA Abstracts with Programs Vol. 36, No. 5.
- Hazlett, T.J., Kincaid, T.R., Loper D., Davies, G. J., DeHan, R., and McKinlay, C., 2004, Realistic Numerical Modeling of Ground-water Flow Based on Quantitative Site Characterization in the Woodville Karst Plain of North Florida, Abstract No: 80775, GSA Abstracts with Programs Vol. 36, No. 5.
- Davies, G. J., Kincaid, T.R., Hazlett, T.J., Loper D., DeHan, R., and McKinlay, C., 2004, Why do quantitative tracing? Lessons and examples from the Woodville Karst Plain of North Florida, Abstract No: 81060, GSA Abstracts with Programs Vol. 36, No. 5.
- Loper D., Hazlett, T.J., Kincaid, T.R., Davies, G. J., McKinlay, C., and DeHan, R., 2004, A Karst Hydrologic Observatory in the Woodville Karst Plain of North Florida, Abstract No: 79699, GSA Abstracts with Programs Vol. 36, No. 5.
- Kincaid, T.R., Davies, G.J., DeHan, R., and Hazlett, T.J., 2004, Characterizing rapid point-recharge to the Floridan aquifer in the Woodville Karst Plain of North Florida: implications for protecting Wakulla spring, Paper No. 31-3, Geological Society of America Abstracts with Programs, Vol. 36, No. 2, p. 85.
- Kincaid, T.R., Denizman, C., Arthur, J., and Hazlett, T.J., 2004, The Florida Cave Database: a GIS of underwater caves for hydrogeological characterizations, Paper No. 31-1, Geological Society of America Abstracts with Programs, Vol. 36, No. 2, p. 85.
- Hazlett, T.J., Loper, D.E., and Kincaid, T.R., 2002, A Hybrid Modeling Approach to Flow in Conduit-Dominated Karst Aquifers, Annual Meeting of the Geological Society of America, Denver, Colorado, Abstracts with Programs.
- Davies G.J., Kincaid, T.R., Hazlett, T.J., Connolly, K.A., and Jablonski, J.M., 2002, Groundwater Tracing as a Means to Collect Data for Groundwater Model Design and Calibration, Annual Meeting of the Geological Society of America, Denver, Colorado, Abstracts with Programs.
- Kincaid, T.R., 2000, The Relationship Between Cave Development and Spring/Aquifer Protection, Proceedings of the 1st Annual Florida Springs Conference, February 2000, Gainesville, Florida, Florida DEP; <http://susdl.fcla.edu/lfnh/related/springs.html>
- Kincaid, T.R., 1999, The Role of springs in the Formation of Karstic Conduit Flow Paths: a Conceptual Model, Annual Meeting of the Geological Society of America, Denver, Colorado, Abstracts with Programs.
- Kincaid, T.R., 1999, Volumetric fractal dimension as a quantitative descriptor for saturated cave morphology, in: Palmer, A.N., Palmer, M.V., and Sasowsky, I.D. (eds.), *Karst Modeling*, Special Publication 5, Karst Waters Institute, Charles Town, West Virginia, p. 186.

- Kincaid, T.R., 1997, Investigating the Fractal Nature of Dissolution Porosity - Insights from 3-D Models of Vugs to Caves, EOS, Transactions, American Geophysical Union, vol. 78, no. 46.
- Kincaid, T.R., 1995, Ground Water - Surface Water Exchange in the Unconfined Karstified Floridan Aquifer; A View from Inside the Aquifer with Implications for Ground Water Protection, Annual Meeting of the Geological Society of America, New Orleans, Louisiana, Abstracts with programs p. A180.
- Kincaid, T.R., Denizman, C., and Ellins, K.K., 1992, Using SF6 to Establish the General Recharge Area for Three Springs in the Santa Fe River, Florida, Annual Meeting of the Geological Society of America, Cincinnati, Ohio, Abstracts with Programs p. A300.
- Ellins, K.K., Kincaid, T.R., Hisert, R.A., Johnson, N.A., Davison, C.A., and Wanninkhof, R.H., 1991, Using Rn222 and SF6 to Determine Groundwater Gains and Stream Flow Losses in the Santa Fe River, Hydrogeology of the Western Santa Fe River Basin, Field Trip Guidebook no. 32. Southeastern Geological Society.
- Ellins, K.K., Kincaid, T.R., Hisert, R.A., Johnson, N.A., and Davison, C.A., 1991, Using Rn222 and SF6 to Determine Groundwater Gains and Stream Flow Losses in the Santa Fe River, Annual Meeting of the Geological Society of America, San Diego, California, Abstracts with Programs p. A326.
- Ellins, K.K., Kincaid, T.R., Hisert, R.A., Johnson, N.A., and Davison, C.A., 1991, Using Rn222 and SF6 to Determine Groundwater Gains and Stream Flow Losses in the Santa Fe River, EOS, Transactions, American Geophysical Union, vol. 72, no. 44.
- Hisert, R.A., Ellins, K.K., Johnson, N.A., Kincaid, T.R., and Davison, C.A., 1991, Estimating Stream Mixing Characteristics Using the Natural and Manmade Geochemical Tracers Radon-222 and Sulfur Hexafluoride in the Karstic Environment of the Santa Fe River, Florida, Annual Meeting of the Geological Society of America, San Diego, California, Abstracts with Programs p. A153.
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Other Publications

Articles

- Kincaid, T.R., 2009. Global Underwater Explorers – Focus on Conservation, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 10, No. 2 Spring 2009, *in press*.
- Jarvis, T. and Kincaid, T.R., 2009. Stinking Sinks and perpetual pot holes: gypsite karst in Laramie, WY, The Wyoming Connection, Winter 2009, Issue 72, pp. 24-29. Wyoming Association of Rural Water Systems, Glenrock, WY.
- Kincaid, T.R. and Werner, C.L., 2008. Karst Hydrogeology of the Woodville Karst Plain Florida, Field Trip Guidebook, American Society of Civil Engineers Field Trip, September 23, 2008, Tallahassee, FL., 23 p. Available for download at:
http://www.geohydros.com/images/Pubs/geohydros_wkp_field_guide_2008.pdf.
- Kincaid, T.R., 2007. The power of connection: The WKPP's exploration of the Wakulla-Leon Sinks Cave System, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 8, No. 4 Fall 2007, p. 8-15.
- Kincaid, T.R., 2007, Can We Save Wakulla Spring? *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 8, No. 1 Winter 2007, p. 8-11.
- Kincaid, T.R., 2006, Water Resources, Sustainability and the Public Trust, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 7, No. 2 Spring 2006, p. 17-23.
- Kincaid, T.R., 2005, Florida Cave Database & GIS, *Underwater Speleology* (Journal of the National Speleological Society – Cave Diving Section), Lake City, FL, Vol. 32, No. 6, p. 14-17. - *Reprint of a Dir Quest Article from 2003*

- Kincaid, T.R., 2005, Problems of Groundwater & Surface Water Management Part 2, *Underwater Speleology* (Journal of the National Speleological Society – Cave Diving Section), Lake City, FL, Vol. 32, No. 3, p. 18-23. - Reprint of a *Dir Quest* Article from 2002
- Kincaid, T.R., 2005, Problems of Groundwater & Surface Water Management, *Underwater Speleology* (Journal of the National Speleological Society – Cave Diving Section), Lake City, FL, Vol. 32, No. 2, p. 13-18. - Reprint of a *Dir Quest* Article from 2002
- Kincaid, T.R., 2005, Hydrologic Connections, *Underwater Speleology* (Journal of the National Speleological Society – Cave Diving Section), Lake City, FL, Vol. 32, No. 1, p. 8-13.
- Reprint of a *Dir Quest* Article from 2000
- McKinlay, C. and Kincaid, T.R., 2004, The Woodville Karst Plain Project (WKPP): Taking the Wakulla Cave System Live, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 5, No. 4 Fall 2004, p. 8-11.
- Kincaid, T.R., 2004, Groundwater Tracing in the Woodville Karst Plain – Part II: Getting Results, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 5, No. 2 Spring 2004, p. 21-26.
- Kincaid, T.R., 2003, Groundwater Tracing in the Woodville Karst Plain – Part I: An Overview of Groundwater Tracing, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 4, No. 4 Fall 2003, p. 31-37.
- Kincaid, T.R., 2003, GIS and the Florida Cave Database, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 4, No. 2 Spring 2003, p. 6-9.
- Kincaid, T.R., 2002, Problems of Groundwater & Surface Water Management: Part 2, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 3, No. 2 Spring 2002, p. 7-11.
- Kincaid, T.R., 2002, Problems of Groundwater & Surface Water Management: Part 1, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 3, No. 1 Winter 2002, p. 7-11.
- Kincaid, T.R., 2001, Speleogenesis in the Kirkgozler Region of the Taurus Mountains, Southern Turkey, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 2, No. 2 Spring 2001, p. 17-22.
- Kincaid, T.R., 2000, Hydrologic Connections: Mapping groundwater flow patterns through Wakulla cave & protecting ground water resources in the Woodville Karst Plain of North Florida, *DIR Quest* (Journal of the Global Underwater Explorers), High Springs, Florida, Vol. 1, No. 2 Winter/Spring 2000, p. 33-38.
- Kincaid, T.R., 1997, Book Review: Alternatives for Ground Water Cleanup, *Environmental & Engineering Geoscience*, vol. 3, no. 3, College Station, Texas.
- Kincaid, T.R., 1996, Our New Direction, *NACD Journal*, vol. 28, no. 2, National Association for Cave Diving, Gainesville, Florida.
- Kincaid, T.R., 1996, Exploring Underwater Caves in Southern Turkey - Project KarstDive 95, Atlas Magazine, February, 1996, vol. 35, Istanbul, Turkey;
Underwater Speleology, 1996, vol. 23, no. 2, National Speleological Society-Cave Diving Section
NACD Journal, 1996, vol. 28, no. 1, National Association for Cave Diving, Gainesville, Florida.
- Kincaid, T.R., 1995, Science and the WKPP, *NACD Journal*, 1995, vol. 27, no. 3, National Association for Cave Diving, Gainesville, Florida.
- Ellins, K.K. and Kincaid, T.R., 1991, Cave Development in the Western Santa Fe River Basin. Hydrogeology of the Western Santa Fe River Basin, Field Trip Guidebook no. 32. Southeastern Geological Society.
- Short Courses, Educational Exhibits & Videos
- Karst Hydrogeology in Florida with Special Focus on the Santa Fe River Basin. Hydrogeology Consortium and University of Florida TREEO Center, August 23-24 2007, Gainesville Florida.
- Karst Hydrogeology in Florida with Special Focus on the Woodville Karst Plain. Hydrogeology Consortium, December 5-6 2006, Tallahassee Florida.

Karst Hydrogeology in Florida with Special Focus on the Woodville Karst Plain. Hydrogeology Consortium, April 27-28 2006, Tallahassee Florida.

Karst Hydrogeology in Florida with Special Focus on the Woodville Karst Plain. Hydrogeology Consortium, November 14-15 2005, Tallahassee Florida.

Florida's Awesome Aquifer – 2002

A traveling poster exhibit and educational video on karst and groundwater flow in Florida.

Developed for the Florida Geological Survey, Tallahassee, Florida.

[http://www.hazlett-kincaid.com/FGS/ Education/posters.htm](http://www.hazlett-kincaid.com/FGS/Education/posters.htm)

Awesome Aquifer Adventure – 2001

A multi-media educational exhibit on aquifers and groundwater.

Developed for the Reading Public Museum, Reading, Pennsylvania.

<http://www.hazlett-kincaid.com/flashdemo.htm>

A Scientific Look at Underwater Caves - Spring, 1997

An educational video about underwater caves and groundwater flow in karst aquifers.

Developed for the Geological Society of America Partners for Excellence Program, Boulder, Colorado.

Project KarstDive - Underwater Cave Exploration in Southern Turkey - Spring, 1997

A documentary video describing underwater cave exploration in Southern Turkey.

Developed for the National Speleological Society-Cave Diving Section, Lake City, Florida.

Presentations

Invited Speaker. How Much is Too Much? Toward A Water Budget Approach to Management.

- First Annual Florida Springs Restoration Workshop, Otter Springs, Florida, March 21, 2011.
- Minimum Flows & Levels Workshop, Lecanto, Florida, October 26, 2011
- Citrus County Board of County Commissioners Meeting, Lecanto, Florida, December 13, 2011

Invited Speaker: Where's the Water Come From? Toward a Water budget for Wakulla Spring. Wakulla county Board of County Commissioners Meeting, Crawfordville, Florida, August, 2011.

Invited Speaker. Modeling Karstic Controls on Watershed-Scale Groundwater Flow in the Floridan Aquifer of North Florida. Texas Groundwater Development Board, Austin, Texas, February 17, 2011.

Invited Speaker. Demonstrating interconnection between a wastewater application facility and a first magnitude spring in a karstic watershed: Tracer study of the Tallahassee, Florida Treated Effluent Spray field 2006-2007.

The Edwards Aquifer Authority, San Antonio, Texas, February 16, 2011; and Karst Conservation Initiative: Interconnection of the Trinity (Glen Rose) and Edwards Aquifers along the Balcones Fault Zone And Related Topics. February 17, 2011 meeting, University of Texas, Austin Texas. Available for download at:

http://www.geohydros.com/images/Pubs/geohydros_wakulla-sesf_trace_110216.pdf.

Invited Speaker. Understanding Florida's Karst: Results & Lessons Learned from the Woodville Karst Plain Research. Wakulla springs Working Group. November 2010, Tallahassee, Florida. Available for download at:

http://www.geohydros.com/images/Pubs/geohydros_wswg_update_101115.pdf.

Project Presentation. Kincaid, T.R. and Meyer, B.A., 2010. Modeling Karstic Controls on Watershed-Scale Groundwater Flow in the Floridan Aquifer of North Florida. Florida Department of Environmental Protection, Tallahassee, FL, November 2010. Available for download at:

http://www.geohydros.com/images/Pubs/geohydros_wakulla_basin_model_101117.pdf.

Invited Speaker. Western Santa Fe River Basin Groundwater Resource Model: Results & Applications. Santa Fe Springs Working Group at Poe Springs, Florida on September 30, 2009. Available for download at:

http://www.geohydros.com/images/Pubs/geohydros_wsfr_model_sfswg_090930.pdf.

Project Presentation. Kincaid, T.R., Meyer, B.A., and Radtke, J., 2009. Western Santa Fe River Basin Groundwater Resource Model: Modeling Results & Methods. Technical presentation delivered to the Suwannee River Water Management District, the U.S. Geological Survey, the St. John's River Water Management District, and the Florida Department of Environmental Protection at the CCDA Waters LLC Water Bottling Facility, High springs, FL on August 3, 2009. Available for download at:

http://www.geohydros.com/images/Pubs/geohydros_ccna_2009_wsfr_model_tech_presentation.pdf.

- Invited Speaker. To Save Wakulla Springs: Future Threats / Future Solutions. Wakulla Wildlife Festival, April 4, 2009, Wakulla Springs Florida. Available for download at: http://www.geohydros.com/images/Pubs/geohydros_wakulla_water_budget_Nov-2009.pdf.
- Invited Speaker. Spring Creek Tracer Testing Update. Wakulla Springs Working Group, October 2009, Tallahassee Florida. Available for download at: http://www.geohydros.com/images/Pubs/geohydros_spring_creek_update_FGS_Oct-2010.pdf.
- Invited Speaker. Global Underwater Explorers – The Next 10 Years. Global Underwater Explorers 2008 Annual Workshop, November 2008, Gainesville Florida.
- Field Trip Leader. Karst Hydrogeology of the Woodville Karst Plain. American Society of Civil Engineers, September 23, 2008, Tallahassee Florida.
- Invited Speaker. How Much is Too Much? Toward a Water Budget for Wakulla Spring. Wakulla Springs Working Group, Tallahassee, FL., April 4, 2008; Wakulla Springs Wildlife Festival, Wakulla Springs Florida; November 2009, Friends of Wakulla Springs, Wakulla Springs Florida. Available for download at: http://www.geohydros.com/images/Pubs/geohydros_wakulla_water_budget_Nov-2009.pdf.
- Invited Speaker. Understanding Our Aquifer, Dye Tracing Challenges Conventional Wisdoms. First International Conference on Mining Impacts to the Human and Natural Environments, Port Charlotte, FL, March 15, 2008. Sponsored by the Charlotte Harbor National Estuary Program, University of Georgia, and the Responsible Growth Management Coalition: <http://www.crms.uga.edu/MiningConference/default.htm>.
- Invited Speaker. Assessing Groundwater Impacts, Groundwater Modeling in Karst Aquifers. First International Conference on Mining Impacts to the Human and Natural Environments, Port Charlotte, FL, March 15, 2008. Sponsored by the Charlotte Harbor National Estuary Program, University of Georgia, and the Responsible Growth Management Coalition: <http://www.crms.uga.edu/MiningConference/default.htm>.
- Invited Speaker. Saving Wakulla Spring. Global Underwater Explorers 2007 Annual Workshop, November 2007, Budapest, Hungary.
- Invited Speaker. Global Underwater Explorers – Approach to Environmental Protection. National Geographic Society, November 2007, Washington DC.
- Field Trip Leader. Karst Hydrogeology of Florida's Santa Fe River Basin. Southeastern Geological Society, August 2007, Gainesville Florida.
- Invited Speaker. Groundwater Modeling in Karst: Floridan Aquifer, Woodville Karst Plain, Santa Fe River Basin. University of Florida Water Institute, August 2007, Gainesville Florida.
- Invited Expert Panelist. Future Directions in Karst Research, Karst Waters Institute Symposium, May 2007, San Antonio Texas.
- Invited Speaker. Mysterious Waters: Discovering Connections in the Woodville Karst Plain. Wakulla Wildlife Festival, April 2007, Wakulla Springs Florida.
- Invited Speaker. Exploration of the Woodville Karst Plain. American Academy of Underwater Sciences Diving for Science Symposium. University of Miami Rosenstiel School of Marine and Atmospheric Science, March 2007, Key Biscayne Florida.
- Invited Speaker. Saving Wakulla Spring through Forceful Applied Science, Creative Collaborations & Community Outreach. Oregon State University – Institute for Water and Watersheds, Winter Water Film Series, March 2007, Corvallis Oregon.
- Field Trip Leader. Karst Hydrogeology of the Woodville Karst Plain. Southeastern Geological Society, December 2006, Tallahassee Florida.
- Field Trip Leader. Karst Hydrogeology of the Woodville Karst Plain and the Santa Fe River Basin, Florida. Global Underwater Explorers 2006 Annual Workshop, November 2006, Gainesville Florida.
- Invited Speaker. Global Water Resources & GUE. Global Underwater Explorers 2006 Annual Workshop, November 2006, Gainesville Florida.

- Invited Speaker. City of Tallahassee Southeast Spray Field Groundwater Tracer Test – Status Report. Wakulla Springs Working Group, Tallahassee, FL., October 16, 2006.
- Invited Speaker. City of Tallahassee Southeast Spray Field Groundwater Tracer Test – Status Report. Wakulla Springs Working Group, Tallahassee, FL., May 4, 2006.
- Invited Speaker. Where Does the Water Come From? Mapping Groundwater Flow in the Woodville Karst Plain. Wakulla Wildlife Festival, April 2006, Wakulla Springs Florida.
- Invited Speaker. Quantitative groundwater tracing and effective numerical modeling in karst: an example from the Woodville Karst Plain of North Florida. U.S. Geological Survey Water Resources Division, January 2006, Reston Virginia.
- Invited Speaker. Global Water Resources & GUE. Bay Area Underwater Explorers Inaugural Meeting, December 2005, San Francisco California.
- Field Trip Leader. Karst Hydrogeology of the Santa Fe River Basin, Florida. Global Underwater Explorers 2005 Annual Workshop, November 2005, Gainesville Florida.
- Invited Speaker. Ames Sink Groundwater Tracer Test – Status Report. Wakulla Springs Working Group, Tallahassee, FL., October 18, 2005.
- Invited Speaker. Finding the Source of Wakulla Spring. Solving Water Pollution Problems in the Wakulla Springshed of North Florida: Science & Technology at Work for a Better Florida, Hydrogeology Consortium and 1000 Friends of Florida Workshop, May 2005, Tallahassee Florida.
- Invited Speaker. Where Does the Water Come From? Mapping Groundwater Flow in the Woodville Karst Plain. Wakulla Wildlife Festival, April 2005, Wakulla Springs Florida.
- Invited Speaker. Global Water Resources & GUE. Global Underwater Explorers 2005 Annual Workshop, November 2005, Gainesville Florida.
- Speaker & Organizer. Exploring the Secrets of Wakulla Springs – 2004.
A Town Hall Meeting presenting cave exploration and research in the Wakulla Spring Cave and a discussion of the threats to spring water quality. Presented by the Big Bend Environmental Forum, Woodville Karst Plain Project, Friends of Wakulla Spring, and the Hydrogeology Consortium. March 2004 in Crawfordville, Florida (approximately 100 people in attendance) and August 2004 in Tallahassee, Florida (approximately 200 people in attendance).
- Invited Speaker. Characterizing the Hydrogeology of the Woodville Karst Plain, North Florida. University of Nevada Reno, Hydrogeology Program Speaker Series, April 2004, Reno Nevada.
- Invited Speaker. Where Does the Water Come From? Mapping Groundwater Flow in the Woodville Karst Plain. Wakulla Wildlife Festival, April 2004, Wakulla Springs Florida.
- Invited Speaker. Where Does the Water Come From? Mapping Groundwater Flow in the Woodville Karst Plain. Wakulla Wildlife Festival, April 2003, Wakulla Springs Florida.
- Invited Expert Panelist: A Workshop to Develop Blue Prints for the Management and Protection of Florida's Springs. Sponsors: Hydrogeology Consortium and the Florida DEP. May 2002.
- Invited Speaker: Awesome Aquifer Adventure Exhibit: The Basics of Groundwater Flow and Aquifer Protection. Reading Area Public Museum, Various Presentations: September 2001 – April 2002.
- Invited Speaker. The Role of Springs in the Formation of Karstic Conduit Flow Paths: A Conceptual Model. Montana State University, Department of Earth Sciences Lecture Series, March 2002, Bozeman Montana.
- Field Trip Leader. Caves and Karst in Florida. National Cave and Karst Research Institute, February 2002, Tallahassee Florida.
- Invited Expert Panel Leader. New Approaches to Modeling Flow and Fate and Transport in Karst Settings / Modeling Groundwater/Surface Water Interactions and TMDL. Sponsors: Hydrogeology Consortium and the Florida DEP. November, 2001.

Invited Speaker. Mechanisms for Groundwater/Surface Water Exchange in the Floridan Karst. Hydrogeology Consortium Speaker Series, October 2001, Tallahassee, Florida.

Invited Speaker. Geochemical Tracing to Define Groundwater/Surface Water Exchange in the Unconfined Floridan Aquifer. American Chemical Society, February 2001, Somerset, New Jersey.

Invited Speaker. A Hydraulic Model for Cave Development / Speleogenesis of the Kirkgozler Caves. International Research and Application Center for Karst Water Resources (UKAM) & the Turkish State Hydraulic Works (DSI), December 2000, Ankara, Turkey.

Invited Speaker. Development of Phreatic Karstic Caves and Groundwater Resource Applications. Shippensburg University Department Environmental Sciences Distinguished Lecturer Series, October 2000, Shippensburg Pennsylvania.

Invited Speaker. Underwater Cave Exploration in the Kirkgozler spring systems, Taurus Mountains Turkey. 5th International Symposium and Field Seminar on Karst Waters and Environmental Impacts, September 1995, Antalya Turkey.