



### Summary (Bio)

Dr. Kincaid is a groundwater scientist, underwater explorer, and advocate for science-based conservation of water resources and aquatic environments. After earning a doctorate degree in 1999, he started a company that focuses on aquifer characterization and protection and bridges the gap between research and commercial application of advanced computer simulation and visualization technologies. At nearly the same time, he also helped start a non-profit organization focused on advancing the use of volunteer technical diving to support scientific and conservation endeavors in fresh water and marine environments.

At [GeoHydros LLC](#), Dr. Kincaid and his team design and implement basin scale groundwater characterization efforts that they leverage to secure commercial opportunities to develop 3D computer models of varied types of complex aquifers including the karstified limestones comprising the Floridan aquifer, heterogeneous glacial sediments comprising surficial aquifers in New York and Pennsylvania; fractured rock aquifers in Pennsylvania and Washington; and structurally complex volcanic and sedimentary rocks underlying Yucca Mountain and the Nevada National Security Site. He and his team have conducted numerous successful groundwater tracing projects in karst and fractured rock aquifers of Florida, Brazil, and Washington, and developed methods of incorporating results into hybrid numerical models. Dr. Kincaid has made his team's work relevant to the broader community through organizing and lecturing at professional and public meetings as well as developing and teaching short courses.

As Executive Director of [Project Baseline](#), Dr. Kincaid works with volunteer scuba divers across the world to record change in underwater environments and engage with scientific, conservation, and government entities to restore and protect underwater ecosystems. As of 2021, *Project Baseline* includes more than 450 divers working on 120 projects in 42 countries regularly documenting 450 sites with pictures, video, and various types of numeric measurements; and has conducted 15 scientific collaborative exploration missions with universities and government entities aboard private oceanographic vessels operating in the U.S., Bahamas, Bermuda, Portugal, France, and Fiji. Here too, Dr. Kincaid has seized every opportunity to lecture and publish about *Project Baseline's* work and his global team's contributions to conservation.

### Current Positions

GeoHydros, LLC – President, Managing Member  
Project Baseline – 501(c)(3) – Executive Director

### Education

Ph.D. Karst Geohydrology – University of Wyoming – 1999  
*Dissertation: Morphologic & Fractal Characterization of Saturated Karstic Caves*  
*Advisors: P. Huntoon, N. Humphrey*

M.S. Hydrogeology – University of Florida – 1994  
*Thesis: Groundwater/Surface Water Interactions in the Western Santa Fe River...*  
*Advisors: K. Ellins, D. Spangler*

B.S. Geology – University of Florida – 1991  
U.S. Air Force Academy – 1986-1987  
Winter Park High School – Orlando Florida – 1986

### Professional Experience (29 Years)

<a href="#">Project Baseline</a> – 501(c) (Executive Director)	2019 - Present
<a href="#">GeoHydros, LLC</a> / Reno Nevada – Reorganized from H2H Associates (President, Principal Hydrogeologist, Principal Modeler)	2010 – Present
H2H Associates, LLC / Reno Nevada – Reorganized from Hazlett-Kincaid, Inc. (Group Leader, Principal Hydrogeologist, Principal Modeler)	2007 – 2010
Hazlett-Kincaid, Inc. / Reading Pennsylvania, Reno Nevada (Vice-President, Principal Hydrogeologist, Geologic Modeler)	1999 – 2007
Global Underwater Explorers (GUE) / High Springs Florida (Vice-President, Board of Directors, Director of Project Baseline)	2000 – 2018
Woodward-Clyde Federal Services / Las Vegas, Nevada (Geologic Modeler)	1998

University of Wyoming / Laramie, Wyoming ( <i>Graduate Research Assistant</i> )	1994 – 1999
GeoSolutions, Inc. / Gainesville, Florida ( <i>Hydrogeologist I</i> )	1992 – 1994
University of Florida, Gainesville, Florida ( <i>Graduate Teaching Assistant</i> )	1991 – 1993
European Diving Center / Fethiye, Turkey ( <i>SCUBA Diving Instructor</i> )	1993
Geo Hazards Inc. / Gainesville, Florida ( <i>Field Technician</i> )	1990 – 1991
Divers Supply Inc. / Gainesville, Florida ( <i>SCUBA Diving Instructor, Sales, Repair Technician</i> )	1990 – 1991
University of Florida Academic Diving Program / Gainesville, FL ( <i>SCUBA Diving Instructor</i> )	1988 – 1991
Sea Shadows Scuba Inc. / St. Croix, U.S. Virgin Islands ( <i>SCUBA Diving Instructor, Sales</i> )	1989
Delta Tau Delta Fraternity / University of Florida, Gainesville, FL ( <i>Kitchen Manager</i> )	1989
Camp Takajo / Naples, Maine ( <i>Camp Counselor, SCUBA Instructor</i> )	1988

Major Projects - GeoHydros

*Geologic Modeling – Las Vegas Valley Nevada – Southern Nevada Water Authority*

**2017 – Present:** Developing a basin-scale hydrostratigraphic framework model of the Las Vegas Valley and surrounding mountains that will provide the framework for regional and sub-regional scale groundwater flow and contaminant transport modeling. Using stratigraphic and statistical modeling methods to simulate stratigraphic and lithologic unit distributions across multiple faults. Model development and output routines being developed to allow multiple conceptual hydrostratigraphic frameworks to be evaluated as part of groundwater flow model uncertainty analyses.

*Groundwater Tracing & Numerical Modeling – Lower Baker Dam, Washington – Puget Sound Energy*

**2014 – Present:** Designed and managed a groundwater tracing program at the Lower Baker Dam that successfully traced leakage flow paths and water velocities around and under the dam. Managed the design and development of a hybrid numerical groundwater flow model that simulated leakage along discrete fracture flow pathways that calibrated to a 3D distribution of continuous piezometer readings, tracer-defined water velocities along the flow paths, the total recorded leakage, and an estimated distribution of leakage at discrete discharges below the dam. Presented interim and final results at numerous meetings with the Board of Consultants and Federal Energy Regulation Committee. [Published results](#) with the Association of Dam Safety Professionals.

*Property Modeling – Tulsa Oklahoma – HollyFrontier Corporation – Tulsa Refinery*

**2017 – 2018:** Developed and inter-related 2D and 3D property models to delineate the horizontal and vertical extent of Light Non-aqueous Phase Liquid (LNAPL) plumes at an operational oil refinery and estimate total recoverable volumes. Models addressed geotechnical response properties, historical water table and apparent product thicknesses, underground structures, and key hydrostratigraphic surfaces. Property datasets included 4-channel Laser-Induced Fluorescence (LIF), Membrane Interface Probe (MIP) responses from a Flame Ionization Detector (FID) and Photo-Ionization Detector (PID), Hydraulic Profiling Tool (HPT), and Electrical Conductivity (EC) responses recorded by all three tools.

*Geologic Structural Modeling – Nevada National Security Site – US Department of Energy*

**2009 – 2016:** Managed development of geological framework models of the Nevada National Security Site that support the characterization of the extent and magnitude of contamination resulting from historical underground nuclear testing. Modeled areas ranged from 570 to 2700 km<sup>2</sup> extending to between 6500 and 9500 m to simulate multiple extensional faults that offset discontinuous and variably thick hydrostratigraphic units. Orchestrated development of automated modeling processes; a methodology for rapidly exporting the geological framework to flow modeling codes; and simulation of radionuclide transport through the carbonate hydrostratigraphic units. Presented interim and final results at multiple internal and public meetings. [Published interim results](#) with the Integrated Groundwater Modeling Center.

*Basin-Scale Water Budget Analysis – North Central Florida – Alachua County Environmental Protection Dept.*

**2014 – 2015:** Led an effort to define aquifer recharge in the surficial and Floridan aquifer basins relying on streamflow data, groundwater extraction records, swallet flow and lake storage measurements, and reported return flows. This work culminated in the development of a spreadsheet tool that was delivered to County staff along with training on its use and the underlying water budget science to support their evaluations of groundwater resource impacts associated with consumptive use permitting.

*Numerical Groundwater Model Evaluation – North-Central Florida – Ginnie Springs Outdoors*

**2013 – 2014:** Evaluated the validity and reliability of the predicted impacts of groundwater pumping to spring and river flows and upper Florida Aquifer groundwater levels generated by the Suwannee River Water Management District’s regional MODFLOW Model. Demonstrated that porous-media simulations over-predict available water supply and under-predict the impacts of groundwater pumping to spring and

river flows through rigorous data-based evaluation methods including: 1) comparison of assigned recharge to verifiable groundwater discharge at sub-watershed scales; 2) comparison of simulated flow paths and travel-times to results of groundwater tracer tests; 3) identification of unreported residuals between simulated heads at rivers and springs and the target heads defined in river and drain node assignments; and 4) identification of unreported deviations between simulated and measured drawdowns at large municipal well fields. Presented [results](#) at multiple professional meetings and to a specially convened meeting with the FLDEP, USGS, and 4 of 5 FL Water Management Districts.

*Groundwater Tracing to an Underground Mine – Vazante Brazil – Votorantim Matais*

**2013:** Conducted a groundwater tracing study that identified discrete leakage locations along a 10 km stretch of river flowing over karstic carbonate rocks and the locations of corresponding discharge into a 5 km section of underground mine tunnels spanning six elevation levels. Study included six tracer injections in the river and continuous monitoring at 17 stations within the underground mine. Results included 11 connections between the river and specific stations in the mine; lack of connection to six stations in the mine; calculated mass recoveries at the mine discharge and river sampling stations; and a hydrogeologic conceptual model of the mechanisms responsible for river water leakage into the mine tunnels.

*Basin-Scale Water Budget Analysis – North Florida, South Georgia – City of Tallahassee Florida*

**2012 – 2013:** Led an effort to define recharge into the surficial aquifer and leakage through the confining unit overlying the Floridan aquifer that relied on streamflow data for several sub-watershed basins in Georgia and Florida. Results included an empirical relationship between confining unit thickness and leakage and a map delineating the distribution of recharge on the basis of confining unit thickness. The maps were used to guide water reuse programs such that recharge to the Floridan aquifer was maximized.

*Groundwater Flow & Contaminant Transport Modeling – Ontario California – Exxon-Mobile*

**2012:** Managed development of a 3D digital conceptual site model (CSM) and 3D numerical groundwater flow model of the West Coast Groundwater Basin surrounding Torrance, California. The CSM addressed hydrostratigraphic and structural relationships between multiple aquifers and a major fault as well as regional water supply wells and injection wells along the Pacific coast. The CSM provided the framework for the groundwater flow model as well as a platform for the visualization of hydraulic communication between the aquifers through intervening confining layers. Capture zones and the influence of the fault and regional wells were evaluated with 3D particle tracks imported into the CSM.

*Karst Aquifer Tracing, Characterization, and Numerical Modeling – North Florida – Florida Geological Survey*

**2001 – 2012:** Managed a multi-faceted regional karst aquifer characterization and numerical modeling effort. Used artificial groundwater tracers to successfully establish hydraulic connections between sinking streams and a municipal wastewater spray field, and several large magnitude springs over distances of km to tens of kms. Developed a dual-permeability numerical groundwater model that simulated tracer-defined groundwater flow paths, spring discharges, regional pumping, and head distributions. Secured grants from climate change programs under the EPA and NOAA to sustain the project between 2010 and 2012. Organized public education programs including workshops, short courses, field trips, and public presentations focusing on the ongoing results of the effort. Published [interim results](#) and a [field guide](#) with the [American Society of Civil Engineers](#) and [final results](#) with the Florida Geological Survey.

*Geologic and Numerical Groundwater Modeling – Philadelphia Pennsylvania – U.S. Department of Defense*

**2001 – 2012:** Managed development of geologic and groundwater models that simulate a 3D heterogeneous multi-aquifer system beneath the former DSCP facility in Philadelphia, PA that has been impacted by more than two million gallons of light non-aqueous phase liquid (LNAPL). Directed development of bi-directional translation between the models allowing for modifications to the simulated geologic structure during numerical model calibration. Directed application of a Lipschitzian parameter optimization algorithm to the numerical model resulting in a locus of acceptable simulations calibrated to 176 surficial aquifer and 20 deep aquifer wells from which statistics were derived to delineate probable contaminant transport vectors and travel-times. Co-developed a method for using the Van Genuchten equation and parameter grids extracted from the geological model to estimate total recoverable LNAPL. Interim and final results were presented at multiple meetings with the PADEP and USDOD.

*Springs Mapping & Karst Aquifer Characterization – Waccasassa Bay Florida – Tarmac America, Inc.*

**2009 – 2011:** Surveyed the Waccasassa Bay, west Central Florida to find, identify, and document spring discharges and karst features. Field-verified hypothesized spring discharges based on the results of a USGS thermal anomaly survey of onshore and offshore regions using electrical conductivity surveys. Developed a conceptual model of groundwater flow patterns based on the results of the springs surveys, available potentiometric surface data, and aquifer performance tests performed at the proposed King Road quarry. Presented findings of the [springs survey](#) at multiple public presentations.

*Hydrogeologic Assessment and Hydrologic Modeling – Guantanamo Bay Cuba – U.S. Navy*

**2010:** Managed and performed a hydrologic characterization of the perimeter road surrounding the naval base to evaluate the integrity of proposed modifications to the road during and after 25-year, 50-year, and 100-year storms. Effort included a series of soil-boring and geophysical surveys, and a series of watershed models that simulated the depth and magnitude of storm water runoff over the road at specific stream crossings.

*Hybrid Numerical Modeling of karstic groundwater flow – North-Central Florida – Coca-Cola North America*

**2004 – 2009:** Managed development of a dual-calibrated regional-scale hybrid numerical groundwater model that successfully simulated the exchange of groundwater between dissolved conduits and the surrounding rocks using pipe-flow features embedded in a porous media matrix. Model was calibrated to heads, spring discharges and river gains, and tracer-defined velocities, corresponding to high water and low water conditions. Simulated the magnitude and spatial extent of the impact of pumping on spring flows, and defined well and spring vulnerabilities to nitrate loading from intensive agricultural operations and municipal wastewater disposal based on simulated travel times. Model results were incorporated into the FDEP's *Basin Management Action Plan (BMAP)*. Presented results at multiple meetings with the FDEP, USGS, and FL Water Management Districts. Published [interim results](#) with the [American Society of Civil Engineers](#) and [final results](#) with the *Integrated Groundwater Modeling Center*.

*Groundwater Modeling for Aquifer Protection – Bucks Co. Pennsylvania – Bucks Co. Planning Commission*

**2005 – 2007:** Managed development of geological and numerical groundwater models to assist six municipalities with the design of a comprehensive aquifer protection strategy. Used strike-and-dip data and outcrop boundaries from geologic maps and cross-sections to simulate 60 interbedded lithologic units of varying thickness, geometry, and permeability that have been structurally tilted in a synclinal basin, faulted, and intruded by a diabase. Simulated structural surfaces provided the framework for groundwater modeling that simulated significant structural controls on groundwater flow paths and velocities across the basin. 3D particle tracks were used to define Zone 2 and Zone 3 wellhead protection zones for the municipalities. Interim and final results were presented at multiple public meetings. Final results and methods were published with the *Integrated Groundwater Modeling Center*.

*Groundwater Modeling for Quarry Dewatering – Stockertown Pennsylvania – H2H Associates, Buzzi-Unicem*

**2003 – 2007:** Managed development of a groundwater model in a heavily karstified and geologically complex terrain in northeast Pennsylvania. Created multiple solids and groundwater flow models to simulate water table response to quarry dewatering and interactions with an adjacent stream. Identified probable karstic flow paths and defined a water budget for the quarry that quantified groundwater contributions and re-circulated water flowing. Results were presented at multiple meetings with the PADEP and PADOT and [published](#) with the *Nevada Water Resources Association*.

*Geologic & Contaminant Modeling – Long Island New York – Metropolitan Transportation Authority*

**2000 – 2005:** 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. Managed development of a contaminant transport model that simulated the movement of dissolved chlorinated volatile organic compounds into or around large underground tunnel structures. Results and methods were presented at multiple meetings with project management, the New York Department of Environmental Conservation, and legal counsel.

*Major Projects – Project Baseline**Great Astorlabe Reef Survey – Fiji – Global Underwater Explorers (GUE)*

**May 2017:** Solicited, organized, and led a collaboration between volunteer divers from the U.S. and New Zealand, and scientists from the University of the South Pacific (USP) and the Florida-based Nova Southeastern University (NSU) aboard the m/v *Ad-Vantage* operating under the auspices of [Project Baseline](#). [Mission objective](#) was to conduct a comprehensive survey of coral reefs surrounding the island of Kandavu. Divers and a 3-person submersible performed stereo-video transects, site surveys, and sample collections. Divers operated in water depths down to 35-m. Submersible operated in water depths down to 1,300-m. It is anticipated that the data collected will support a PhD. Dissertation and support national and international policies aimed at coral reef preservation and rehabilitation.

*Underwater Archeology – Monitor National Marine Sanctuary, North Carolina – NOAA*

**September 2016:** Solicited and organized a collaboration with the National Oceanographic and Atmospheric Administration ([NOAA](#)) and other partners to explore and digitally document the wrecks of the *U-576*, *Bluefields*, and *YP-389*, which were all sunk off the coast of North Carolina during the Battle of the Atlantic in WWII. Explorations were conducted aboard the r/v *Baseline Explorer* operating under the auspices of [Project Baseline](#). Coordinated scientific [objectives](#) for human occupied submersible dives in



~240 meters water depth to perform photogrammetric and laser surveys, and laser scanning and positioning instrumentation; and managed technical SCUBA dives in 90 meters water depth to perform photogrammetric surveys. Extensive public engagement was undertaken by [NOAA](#) including broadcasts from several news outlets including: the [CBS Sunday Morning](#), [Wall Street Journal](#), and [Fox News](#); and articles published in: the [Washington Post](#), [Charlotte Observer](#), [Coastal Review](#), and [Alert Diver](#).

*XL Catlin Deep Ocean Survey – Bermuda – the Nekton Mission*

**July-August 2016:** Solicited, organized, and led a collaboration with the [Nekton Mission](#) aboard the r/v *Baseline Explorer* operating under the auspices of [Project Baseline](#). Our mission carried scientists from [Oxford](#), Stanford, Salem State Univ., Univ. Puerto Rico, [Trinity College](#), and the [Bermuda Institute of Ocean Sciences](#), and officers from the Bermuda Dept. of the Env. & Natural Resources underwater to survey ecological conditions in water depths from 300 meters to the surface using human-occupied underwater vehicles (HUVs) and technical SCUBA divers. Coordinated scientific objectives for submersible and SCUBA diving operations. Organized and managed 17 deep technical SCUBA dives, 12 below 90 m in which 73 stereo video transects were performed as well as water, coral, sponge, and algae sampling were performed. [Achievements](#) included identification of ~100 new species, confirming the definition of the *Rariphotic Zone*, substantial global [public engagement](#), and catalyzing [ocean policy](#).

*Fort Lauderdale Reef Survey – Fort Lauderdale, Florida – Miami Waterkeeper*

**March 2016:** Solicited, organized, and led a collaboration with the [Miami Waterkeeper](#) and [Philippe Cousteau](#) to establish baseline conditions for coral reef health in the area that will be impacted by a proposed expansion of Port Everglades. Organized [media coverage](#) that included 20 news articles that raised awareness about the importance of the corals. The data and media supported Miami Waterkeeper's petition to the USACE to expand baseline documentation and ongoing monitoring.

*Mesophotic Reef Survey – Oculina Bank, Florida – Harbor Branch Oceanographic Institute (HBOI)*

**2014-2015:** Solicited, organized, and led a collaboration with HBOI aboard the r/v *Baseline Explorer* and the m/v *Pacific Provider* operating under the auspices of [Project Baseline](#) to survey and document little known *Oculina* coral that live in water depths generally >60-m. Led a team of technical divers to perform video-surveys of multiple reefs that had not been visited for ~30 years. [Two-person submersibles carried scientists from HBOI](#) to the reefs to perform detailed surveys and targeted sample collections. The data and media supported HBOI's effort to increase monitoring and enforcement of regulations governing the Oculina Bank Marine Protected Area.

*Coral Reef Eutrophication – West Palm Beach - Looe Key, FL – Harbor Branch Oceanographic Institute (HBOI)*

**2014-2015:** Solicited, organized, and led a collaboration with HBOI aboard the r/v *Baseline Explorer* and the m/v *Pacific Provider* operating under the auspices of [Project Baseline](#). [Mission objective](#) was to survey the degree of eutrophication in shallow coral reefs. Led a team of divers to perform video surveys and extensive algae sample collections. Organized extensive media coverage including an expose in [Slate Magazine](#) and a program on CNN's [New Day](#).

*Mesophotic Reef Surveys – Azores & Algarve, Portugal – Univ. of the Azores & Univ. of the Algarve*

**2014:** Solicited, organized, and led a collaboration with HBOI aboard the m/v *Pacific Provider* operating under the auspices of [Project Baseline](#). [Mission objective](#) was to document black and red coral distributions and sizes in water depths of between 0 and 1000 feet. Led a team of technical divers to perform video-surveys and sample collections, and to establish monitoring stations that can be returned to for future comparisons. Two-person submersibles carried scientists to the reefs to perform detailed surveys and targeted sample collections. The data and media supported efforts by the universities to establish marine protected areas and [scientific publication](#).

*Cave Survey & Instrumentation – Woodville Karst Plain, Florida – Woodville Karst Plain Hydrologic Research Program*

**2001-2012:** Planned and executed cave radio location dives to establish fixed reference points in the cave that were used to correct cave maps; and the installation of Falmouth hydrologic meters and sampling tubes at eleven locations in caves at depths ranging from 30 to 90 meters. Managed installation of wells that intersect the cave and through which meter cabling was installed to render the cave monitoring stations accessible from the surface.

*Cave Surveys – Wuming District, China – Geological Society of China*

**December 2009:** Member of a 13-person team of divers with the Global Underwater Explorers invited to explore and survey underwater caves in the [Leye-Fengshen Geopark](#). Other objectives were to develop a sufficient understanding of the characteristics of karst development to estimate the probability the existence of other significant underwater caves in the region; and to collect and provide information to the local government and water supplier to assist them in determining the source or sources of the local public water supply. Developed a method for surveying caves in low-visibility and converting the survey data to 3D models to facilitate exploration. Collected water chemistry samples in dry and saturated caves.

*Underwater Archeology – Kea, Greece – Global Underwater Explorers & Ocean Discovery*

**1999:** Solicited, organized, and participated in a multi-national exploration project to document the exterior and interior of the wreck of the HMHS Britannic at water depths of between 100-m and 120-m in the Kea Channel. Ours was the first [dive mission](#) to include extensive penetration into Britannic. Video of the expedition was broadcast by National Geographic, BBC, the History Channel and Discovery Channel.

*Underwater Cave Exploration & Survey – Southern Turkey – Hacettepe & Middle East Technical Universities and the Directorate of State Hydraulic Works.*

**1995-1996:** Solicited, organized and led a multi-national [project](#) to explore and survey four underwater caves in southern Turkey resulting in records for cave penetration and depth. Produced a detailed [report](#) on the caves and observed groundwater flow patterns for the project sponsors.

Expert Testimony / Litigation Support

St. Johns Riverkeeper, Florida Defenders of the Environment, Silver Springs Alliance, & Alice Gardner vs. St. Johns River Water Management District, Application No. 91926-4, Marion County, FL	2017
Mike Laudicina and Don DeMaria vs. DEP File No.: FLA671932-003-DW1P, etc. Florida DEP, and Florida Keys Aqueduct Authority; Monroe County FL	2015
Sierra Club, Inc., and St. Johns Riverkeeper, Inc. with Florida Defenders of the Environment, Inc., vs. Sleepy Creek Lands, LLC and St. Johns River Water Management District, Case No. 14-2608; and Karen Alhers and Jeri Baldwin with Florida Defenders of the Environment, Inc. vs. Sleepy Creek Lands, LLC and St. Johns River Water Management District, Case No. 14-2609; Palatka FL	2014
Joseph Glisson vs. City of Tallahassee and FL Dep. of Env. Protection: DOAA Case No.: 11 2953	2011
Sand Hills Lake Rural Community Special Treatment Zone Administrative Hearing (telephone)	2011
Brown vs. Dept. of Community Affairs and Bay County Florida: Case No.: 10-0858GM	2010
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 Tsp Supervisors – Development Hearing, Thompson Tsp PA	2002
Gel-Bare Farms; North Heidelberg Tsp Development Hearing, North Heidelberg Tsp PA	2002

Professional Associations

Global Underwater Explorers (www.gue.com): Board of Directors	2000 – 2018
Florida Springs Institute (floridaspringsinstitute.org/): Advisory Board	2011 – Present
Wakulla Springs Alliance (www.wakullaspringsalliance.org): Board of Directors	2014 – 2016
Hydrogeology Consortium (www.hydrogeologyconsortium.org): Board of Directors	2002 – 2014
Southeastern Geological Society (www.segs.org): President	2007 – 2008
Southeastern Geological Society (www.segs.org): Vice President	2006 – 2007
National Groundwater 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
National Speleological Society – Cave Diving Section (www.nsscds.com): Member	1989 – Present

University Teaching Experience

*University of Wyoming*

EPSCoR	Geology Summer Camp for non-Native & Native American high school students	1999
GEOL 1100	Physical Geology – Lab Instructor	1999
GEOL 3450	Fission, Fusion & Psychosis – Teaching Assistant	1995 – 1998
ENR 3000	ENR Approaches – Guest Lecturer	1997
GEOL 4444	Geohydrology – Guest Lecturer	1997
GEOL 4444	Geohydrology – Teaching Assistant	1995

*University of Florida*

OCE 2005	Introduction to Oceanography – Discussion Leader	1992 – 1993
GLY 3200	General Mineralogy – Lab Instructor	1992
GLY 4790	Geology Field Camp – Assistant Instructor	1992

GLY 1000	Introduction to Geology – Discussion Leader	1992
PEN 3138	Advanced Scuba Diving – Instructor	1989 – 1991
PEN 4135	Scuba Diving Leadership I – Instructor	1989 – 1991
PEN 4139	Scuba Diving Leadership II – Instructor	1989 – 1991
PEN 1136	Open Water Scuba Diving – Instructor	1988 – 1991

Awards & Honors

Science Award – National Speleological Society – Cave Diving Section	2006
Florida Springs Protection Award – Florida Department of Environmental Protection	2005
Distinguished Mentor – Geological Society of America	2004
Who’s Who among America’s University Students	1998
Henry Ford European Conservation Award (Project KarstDive)	1997
Research Grant (Project KarstDive) – National Association for Cave Diving	1996
Research Grant (Project KarstDive) – National Speleological Society - Cave Diving Section	1996
Arts and Sciences Summer Research Fellowship – University of Wyoming	1996
Cave Science Research Grant (Project KarstDive) – National Speleological Society	1996
Geo-Hazards Award (Outstanding Research in Environmental Geology)	1994
Research Grant (MS Thesis) – Department of Sponsored Research, University of Florida	1991
Sigma Gamma Epsilon (Geological Honor Society)	
Danker Award (Outstanding Field Geologist) – University of Florida	1990
Outstanding Instructor Trainer (University of Florida Academic Diving Program)	1989
Full Academic Scholarship (U.S. Air Force Academy)	1986
Varsity Wrestling Team (U.S. Air Force Academy)	1986 – 1987
National Honor Society (Winter Park High School)	1986

SCUBA Diving Credentials

Certifications: Scuba Diver (1980 – Present): YMCA, PADI, NAUI, CMAS; Scuba Instructor (1988 – 1994): NAUI, CMAS; Cavern Diving Instructor (1993 – 1994): NSS-CDS; Cave Diver (1988 – Present): NACD, NSS-CDS, GUE; Technical Diver (1990 – Present): GUE, IANTD; JJCCR Rebreather Diver (2013 – Present): GUE; Recompression Chamber Certification (2015): IANTD.

Dive Experience: >2000 dives; >950 dives using stage or decompression bottles; >900 dives requiring in-water stage decompression with oxygen; >800 dives using diver propulsion vehicles; >750 cave dives; >200 wreck dives; >750 dives below 45 m; >300 dives below 75 m; >100 dives below 100 m

Records: Longest underwater cave penetration North America (Manatee Springs, Florida): 1994 / 3,340 m; deepest underwater cave penetration in Turkey (Finike-Suluin, Turkey): 1995 / 127 m.

Peer Reviewed Papers

27. Stefanoudis, P.V., Gress, E., Pitt, J.M., Smith, S.R., Kincaid, T., Rivers, M., Andradi-Brown, D.A., Rowlands, G. Woodall, L.C., Rogers, A.D., 2018. Depth-dependent structuring of reef fish assemblages from the shallows to the rariphotic zone, *Science Advances* in review.
26. Kincaid, T.R., Romocki, R., Meyer, B.A., Annandale, G., Falvey, H., and Hultman, W., 2018. Evaluating erodibility, mitigating leakage, and addressing potential failure modes at a concrete arch dam through groundwater modeling. Proceedings, 2018 Annual Conference of the American Society of Dam Safety Officials, Seattle WA. [Available for download](#) at Researchgate.net.
25. Kincaid, T. and Meyer, B., 2015. A Dual-Calibrated, Hybrid Model of Conduit Flow to Springs in a Portion of the Floridan Aquifer in North-Central Florida. MODFLOW and More 2015: Modeling a Complex World, Proceedings, eds. R Maxwell, M. Hill, C. Zheng, and M. Tonkin. Integrated Ground Water Modeling Center (IGWMC), Colorado School of Mines, Golden CO. [Available for download](#) at Researchgate.net.
24. 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. [Available for download](#) from the FGS.

23. Kincaid, T. and Day, K., 2013. Benefits of Automation in Hydrostratigraphic Framework Modeling – 1: A New HFM for Pahute Mesa, Nevada. MODFLOW and More 2013: Translating Science into Practice, Proceedings, eds. R. Maxwell, M. Hill, C. Zheng, and M. Tonkin. Integrated Groundwater Modeling Center (IGWMC), Colorado School of Mines, Golden, CO. [Available for download](#) at Researchgate.net.
22. Kincaid, T. and Meyer, B., 2013. Benefits of Automation in Hydrostratigraphic Framework Modeling – 2: Translating Geologic Framework Assignments from Solids Modeling to Flow Modeling Software. MODFLOW and More 2013: Translating Science into Practice, Proceedings, eds. R. Maxwell, M. Hill, C. Zheng, and M. Tonkin. Integrated Groundwater Modeling Center (IGWMC), Colorado School of Mines, Golden, CO. [Available for download](#) at Researchgate.net.
21. Kincaid, T.R., Day, K.E., and Lamb, R., 2011. 3D Solids and Parameter Modeling to Facilitate Triad-Compliant Rapid Site Characterization. 1) Am. Soc. Civil Eng., Proceedings of the 24<sup>th</sup> Central PA Geotechnical Conference, November 2009, Hershey, PA; 2) Transportation Research Board ADC60 Committee Waste Management & Resource Efficiency Summer Environmental Conference, New York City, July, 2009; 3) Proceedings of the 2010 Annual Meeting of the National Groundwater Association, Las Vegas, NV. [Available for download](#) at Researchgate.net.
20. 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 Eng. and Env. Impacts of Karst*, Geotechnical Special Pub. No. 33, Am. Soc. of Civil Eng, Reston, VA, pp. 288-302. [Available for download](#) at Researchgate.net.
19. 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 Eng. and Env. Impacts of Karst*, Geotechnical Special Publication No. 33, American Society of Civil Engineers, Reston, VA, pp. 313-324. [Available for download](#) at Researchgate.net.
18. 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 Eng. and Env. Impacts of Karst*, Geotechnical Special Publication No. 33, American Society of Civil Engineers, Reston, VA, pp. 351-361. [Available for download](#) at Researchgate.net.
17. 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 Researchgate.net.
16. Kincaid, T.R., 2007. Karst Hydrogeology of the Santa Fe River Basin, Fieldtrip Guidebook No. 47, Southeastern Geological Society (SEGS), Tallahassee, FL. [Available for download](#) from the SEGS.
15. Kincaid, T.R., 2006. Karst Hydrogeology of the Woodville Karst Plain: Wakulla & St. Marks River Basins, Field Trip Guidebook No. 46, Southeastern Geological Society (SEGS), Tallahassee, FL. [Available for download](#) from the SEGS.
14. 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 Researchgate.net.
13. 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. [Available for download](#) at Researchgate.net.
12. Vilardi, C.V. and Kincaid, T.R., 2002. Design-Phase Geologic Framework Modeling for Large Construction Projects, Proceedings: Battelle 3<sup>rd</sup> Int. Conference on the Remediation of Chlorinated and Recalcitrant Compounds, Monterey, California. [Available for download](#) at Researchgate.net and [Battelle.org](#).
11. Kincaid, T.R. and Heffron, M., 2002. Database Design & Management for 3-D Hydrogeologic Modeling at the DOD DSCP Facility, Philadelphia, PA, Proceedings: Science and Engineering Technology Conference; National Defense Industry Association, Charleston, SC. [Available for download](#) at Researchgate.com and by request from the [Defense Technical Information Center](#).
10. Kincaid, T.R., 2001. New Concepts for Groundwater Modeling in the Floridan Aquifer, Proceedings of the 65<sup>th</sup> Annual Meeting of the Florida Academy of Sciences Saint Leo, Florida; Florida Scientist, Vol 64, Supplement 1.



9. 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. [Available for download](#) at Researchgate.net.
8. 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. [Available for download](#) at Researchgate.net.
7. 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. [Available for download](#) at Researchgate.net.
6. 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, p.169-190. [Available for download](#) at Researchgate.net.
5. Kincaid, T.R., 1999. Morphologic and Fractal Characterization of Saturated Karstic Caves, Ph.D. Dissertation, University of Wyoming, 174 p. [Available for download](#) at Researchgate.net.
4. 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 Researchgate.net.
3. 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.
2. Kincaid, T.R., 1997. Book Review: Alternatives for Ground Water Cleanup, *Environmental & Engineering Geoscience*, vol. 3, no. 3, College Station, Texas.
1. 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. [Available for download](#) at Researchgate.net.

### Abstracts & Posters

43. Kincaid, T.R., Meter, B.A., and Day, K.E., 2016. Leveraging Advanced Modeling & Visualization Methods to Support Sustainable Groundwater Management in California. 25<sup>th</sup> Groundwater Resources Association Annual Meeting, *Groundwater Supply, Quality, and Sustainability: The Challenges Ahead*, Concord CA, September 2016.
42. Kincaid, T.R. and Meyer, B.A., 2016. Modeling methods for the karstic Floridan aquifer: Consequences of inappropriate groundwater models and assumptions. 5<sup>th</sup> University of Florida Water Institute Symposium – *Sustainable Water Resources: Complex Challenges, Integrated Solutions*, Gainesville FL, February 2016.
41. Carmichael, R. and Kincaid, T., 2016. A Collaborative Effort to Expand Underwater Human Exploration and Promote Marine Conservation. Underwater Intervention 2016, MTS MUV Symposium on Manned Submersibles, Proceedings, New Orleans LA, February 2016.
40. Meyer, B., Kincaid, T., and Day, K., 2015. Integrating a Geohydrologic Framework Model into a 3D Groundwater Flow Model to Delineate Wellhead Protection Zones in Bucks County PA. MODFLOW and More 2015: Modeling a Complex World, Proceedings, eds. R Maxwell, M. Hill, C. Zheng, and M. Tonkin. Integrated Groundwater Modeling Center (IGWMC), CO School of Mines, Golden CO.
39. 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.
38. 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. [Available for download](#) at Researchgate.net.
37. Kincaid, T.R. and Meyer, B.A., 2011. A Numerical Model of Conduit Controlled Groundwater Flow in the Floridan aquifer. Program with Abstracts, NGWA Groundwater Summit, Baltimore, May 2011.

36. 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.
35. 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 Researchgate.net.
34. 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.
33. Kincaid, T.R. and Meyer, B.A., 2009. Delineating saturated conduit patterns and dimensions in the upper Floridan aquifer through numerical groundwater flow modeling. Program with Abstracts, 2009 Fall Meeting of the American Geophysical Union, 14-18 December, San Francisco CA. [Available for download](#) at Researchgate.net.
32. 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 Man. of Groundwater in Karst Terrains, National Groundwater Association, Safety Harbor, FL.
31. 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 Groundwater in Karst Terrains, National Groundwater Association, Safety Harbor, FL. [Available for download](#) at Researchgate.net.
30. 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.
29. 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.
28. 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 Abs. with Prog. Vol. 39, No. 6, p. 595.
27. 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 Groundwater in Karst Terrains, National Groundwater Association, Safety Harbor, Florida.
26. 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 Groundwater in Karst Terrains, National Groundwater Association, Safety Harbor, Florida.
25. Meyer, B.A., Kincaid, T.R., and Hazlett, T.J., 2007. A Method for Integrating Detailed Karst Feature Data into Groundwater Flow Models, Program with Abstracts, 4th Conference on Hydrogeology, Ecology, Monitoring, and Management of Groundwater in Karst Terrains, National Groundwater Association, Safety Harbor, Florida.
24. 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 Groundwater in Karst Terrains, National Groundwater Association, Safety Harbor, FL.
23. 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 Groundwater Issues, Portland ME, Sep. 18-19, 2006.
22. Hazlett, T.J., Kincaid, T.R., Meyer, B.A., and Day, K.E., 2006. Innovative Groundwater Supply Protection Modeling, Bucks County, Pennsylvania, Program with Abstracts, NGWA 2006 Focus Conference on Eastern Regional Groundwater Issues, Portland ME, Sep. 18-19, 2006.
21. 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.

20. 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.
19. 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.
18. 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 Abs. with Progs. Vol. 36, No. 5.
17. 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.
16. 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.
15. 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, Geol. Soc. of Am. Abstracts with Programs, Vol. 36, No. 2, p. 85.
14. 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.
13. 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.
12. 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.
11. Kincaid, T.R., 2000. The Relationship Between Cave Development and Spring/Aquifer Protection, Proceedings of the 1st Annual Florida Springs Conference, Feb. 2000, Gainesville FL, Florida DEP.
10. Kincaid, T.R., 1999. The Role of Springs in the Formation of Karstic Conduit Flow Paths: a Conceptual Model, Annual Meeting of the Geol. Soc. of America, Denver, CO, Abstracts with Programs.
9. 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.
8. 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.
7. 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, LA, Abstracts with programs p. A180.
6. 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.
5. 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 GB no. 32. SE Geological Society.
4. 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.
3. 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.
2. Hisert, R.A., Ellins, K.K., Kincaid, T.R., Johnson, N.A., and Davison, C.A., 1991. Using the Artificial Tracer Sulfur Hexafluoride (SF6) to Estimate Underground Flow Rates and Pathways of Water Flowing Through the Karstic Window Region of the Santa Fe River, O'leno State Park, Florida, EOS, Transactions, American Geophysical Union, vol. 72, no. 44.

1. 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.

#### Publically Available Reports

15. Kincaid, T.R., 2017. Review of the 2016 Version of the North Marina Groundwater Model, Marina Coast California. Report developed for the Marina Coast Water District, Monterey California, K. Van Der Matten, manager. [Available for download](#) at Researchgate.net.
14. Kincaid, T.R. and Meyer, B.A., 2015. Discharge-Based Determination of Aquifer Recharge for Select Watersheds in the Suwannee River Basin of North-Central Florida, Report developed for the Alachua County Environmental Protection Department, Gainesville, Florida, C. Bird, manager. [Available for download](#) at Researchgate.net.
13. Kincaid, T., Meyer, B., and Day, K., 2014. Assessment of the 2008 North Florida Numerical Groundwater Flow Model Limitations & Implications for Groundwater Resource Management. Report developed for Ginnie Springs Outdoors, LLC, High Springs Florida and submitted to the Florida Department of Environmental Protection and the Suwannee River Water Management District. [Available for download](#) at Researchgate.net.
12. Meyer, B.A. and Kincaid, T.R., 2014. Contributions of Total Nitrogen from OSTDS to the Indian River Lagoon and the Wakulla-St. Marks River Drainage Basins, Florida. Report developed for the Coastal Ocean Association of Science & Technology, B. Lapointe, manager. [Available for download](#) at Researchgate.net.
11. Kincaid, T.R. and Meyer, B.A., 2013. Delineation of Recharge to the Floridan Aquifer System Based on Overburden Thickness in the Vicinity of Tallahassee, Florida. Report developed for the City of Tallahassee Florida, B. Gomez, manager. [Available for download](#) at Researchgate.net.
10. Kincaid, T.R. and Meyer, B.A., 2013. Delineation of Springshed Boundaries for Silver Springs Florida and Surrounding Major Springs. Excerpt from a report prepared for the St. Johns Riverkeeper, Jacksonville FL, L. Rinaman, manager. [Available for download](#) at Researchgate.net.
9. Kincaid, T.R., Meyer, B.A., and Day, K.E., 2012. Results from the Woodville Karst Plain Hydrologic Research Program: 2011-2012; *Bird Sink Tracing, Groundwater Model Revisions*; Report developed for the University of West Florida, R. Snyder, manager, and the Florida Geological Survey, R. Dehan, manager. [Available for download](#) at Researchgate.net.
8. Kincaid, T.R., Meyer, B.A., Loper, D., and Chicken, E., 2010. Results from the Woodville Karst Plain Hydrologic Research Program: 2010; *Hydrologic Monitoring, Groundwater Model Development*; Report developed for the University of West Florida, R. Snyder, manager, and the Florida Geological Survey, R. Dehan, manager. [Available for download](#) at Researchgate.net.
7. Kincaid, T.R., Loper, D., Chicken E., Dimova, N., and Burnett, W.C., 2010. Results from the Woodville Karst Plain Hydrologic Research Program: 2009; *Hydrologic Monitoring, Data Portal Update, Lost Creek Tracing #2*; Report developed for the Florida Geological Survey, R. Dehan, manager. [Available for download](#) at Researchgate.net.
6. Kincaid, T.R., Loper, D., and Chicken E., 2009. Results from the Woodville Karst Plain Hydrologic Research Program: 2008; *Statistical Modeling, Hydrologic Monitoring; Database & Data Portal development; Lost Creek Tracer Testing*; Report developed for the Florida Geological Survey, R. Dehan, manager. [Available for download](#) at Researchgate.net.
5. Kincaid, T.R., 2009. Survey of Groundwater Discharges in the Waccasassa Bay Area between Dowry Creek and Beetree Slough, near Cedar Key Florida. Report developed for Titan/Tarmac America LLC, C. Burns, manager. [Available for download](#) at Researchgate.net.
4. Kincaid, T.R., Hazlett, T.J., Davies, G., and Werner, C.L., 2007. Hydrogeologic Characterization and Modeling of the Woodville Karst Plain, North Florida Report of Investigations 2005-2006; *Delineation of Hawthorne Confining Unit; Cave Map Correction via Radio Location; Analysis of the Ames Sink Tracer Test; Initiation of the Tallahassee Sprayfield Tracer Test*; Report developed for the Florida Geological Survey, R. Dehan, manager. [Available for download](#) at Researchgate.net.
3. Kincaid, T.R. and Hazlett, T.J., 2004. Initiation of the Woodville Karst Plain Hydrologic Research Program - 2003-2004 Progress Report: *Leon Sinks Groundwater Tracing, In-Cave Hydrologic Meter Installation & Data Analysis; Preliminary Statistical & Numerical Groundwater Modeling*; Report



- developed for the Florida State Univ. Geophysical Fluid Dynamics Institute, D. Loper, manager and the Florida Geological Survey, R. Dehan, manager. [Available for download](#) at Researchgate.net.
2. Kincaid, T.R., Denizman, C., and Davies, G., 2002. Hydrologic Characterization of the Woodville Karst Plain Florida - Summary and Results for Fiscal-Year 2002: *Florida Cave Database Development, Groundwater Tracing in the Leon Sinks Cave System, & Development of the Educational Program - Florida's Awesome Aquifer*; Report developed for the Florida State University Geophysical Fluid Dynamics Institute, D. Loper, manager and the Florida Geological Survey, R. Dehan, manager. [Available for download](#) at Researchgate.net.
  1. Kincaid, T.R. and Jablonski, J.M., 1996. Exploration of Phreatic Caves in the Taurus Mountain Region of Southern Turkey near Antalya: Technical Report, Project KarstDive 95. Submitted to the National Speleological Society - Cave Diving Section, Live Oak FL; the National Association for Cave Diving, Gainesville FL; the Directorate of State Hydraulic Works, Ankara Turkey; the International Research and Application Center for Karst Water Resources, Ankara Turkey; and the Underwater Research Society of Turkey, Ankara Turkey. [Available for download](#) at Researchgate.net.

### Other Articles & Publications

21. 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.
20. 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.
19. 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.
18. 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.
17. 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.
16. 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: 2003
15. 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: 2002
14. 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: 2002
13. 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: 2000
12. 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 FL, Vol. 5, No. 4 Fall 2004, p. 8-11.
11. Kincaid, T.R., 2004. Groundwater Tracing in the Woodville Karst Plain - Part II: Getting Results, DIR Quest (Jor. Global Underwater Explorers), High Springs FL, Vol. 5, No. 2 Spring 2004, p. 21-26.
10. 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 FL, Vol. 4, No. 4 Fall 2003, p. 31-37.
9. Kincaid, T.R., 2003. GIS and the Florida Cave Database, DIR Quest (Journal of the Global Underwater Explorers), High Springs FL, Vol. 4, No. 2 Spring 2003, p. 6-9.
8. Kincaid, T.R., 2002. Problems of Groundwater & Surface Water Management: Part 2, DIR Quest (Journal of the Global Underwater Explrs.), High Springs FL, Vol. 3, No. 2 Spring 2002, p. 7-11.
7. Kincaid, T.R., 2002. Problems of Groundwater & Surface Water Management: Part 1, DIR Quest (Journal of the Global Underwater Explorers), High Springs FL, Vol. 3, No. 1 Winter 2002, p. 7-11.

6. 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 FL, Vol. 2, No. 2 Spring 2001, p. 17-22.
5. Kincaid, T.R., 2000. Hydrologic Connections: Mapping groundwater flow patterns through Wakulla cave & protecting groundwater resources in the Woodville Karst Plain of North Florida, DIR Quest (Jor. of the Global Underwater Explrs), High Springs FL, Vol. 1, No. 2 Winter/Spring 2000, p. 33-38.
4. Kincaid, T.R., 1996. Our New Direction, NACD Journal, vol. 28, no. 2, National Association for Cave Diving, Gainesville FL.
3. 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 FL.
2. Kincaid, T.R., 1995. Science and the WKPP, NACD Journal, 1995, vol. 27, no. 3, National Association for Cave Diving, Gainesville FL.
1. 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. SE Geol. Society.

#### Short Courses, Educational Exhibits & Videos

8. 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.
7. Karst Hydrogeology in Florida with Special Focus on the Woodville Karst Plain. Hydrogeology Consortium, December 5-6 2006, Tallahassee Florida.
6. Karst Hydrogeology in Florida with Special Focus on the Woodville Karst Plain. Hydrogeology Consortium, April 27-28 2006, Tallahassee Florida.
5. Karst Hydrogeology in Florida with Special Focus on the Woodville Karst Plain. Hydrogeology Consortium, November 14-15 2005, Tallahassee Florida.
4. Florida's Awesome Aquifer, 2002. A traveling poster exhibit and educational video describing karst and groundwater flow in Florida. Developed for the Florida Geological Survey, Tallahassee, Florida.
3. Awesome Aquifer Adventure, 2001. A multi-media educational exhibit on aquifers and groundwater. Developed for the Reading Public Museum, Reading, Pennsylvania.
2. A Scientific Look at Underwater Caves, 1997. Educational video about underwater caves and groundwater flow in karst aquifers. Developed for the Geological Society of America Partners for Excellence Program, Boulder, Colorado.
1. Project KarstDive, Underwater Cave Exploration in Southern Turkey, 1997. Documentary video describing underwater cave exploration in Southern Turkey. Developed for the National Speleological Society-Cave Diving Section, Lake City, Florida.

#### Public Presentations

101. Invited Speaker. The Hydrologic Cycle & Groundwater, *a hands-on lecture with groundwater simulator*. Guest teacher. Elmcrest Elementary School – 4<sup>th</sup> Grade class. Reno NV, May 2018.
100. Invited Speaker. Project Baseline Progress Report & Workshop. Global Underwater Explorers 2017 Global Diving Conference, Gainesville FL, October 2017.
99. Invited Speaker. The Hydrologic Cycle & Groundwater, *a hands-on lecture with groundwater simulator*. Guest teacher. Elmcrest Elementary School – 3<sup>rd</sup> Grade class. Reno NV, March 2017.
98. Invited Speaker. The Hydrologic Cycle & Groundwater, *a hands-on lecture with groundwater simulator*. Guest teacher. Elmcrest Elementary School – 3<sup>rd</sup> Grade class. Reno NV, February 2017.
97. Invited Speaker. Project Baseline – The Role of Underwater Citizen Scientists. ESRI Ocean GIS Forum, Redlands CA, November 2, 2016.
96. Invited Speaker. Models – The Bad and the Ugly. Florida Springs Restoration Summit, Ocala FL, October 2016.
95. Invited Speaker. Sustaining the Floridan Aquifer. Meeting of the Florida Audubon Society, Lake City FL, September 2016.

94. Invited Speaker. Project Baseline – Sustaining Our Underwater World through Collaborations between Divers and Scientists. Special Event promoting the launch of the XL Catlin Deep Ocean Survey, hosted by the Bermuda Underwater Exploration Inst., Hamilton Bermuda, July 19, 2016.
93. Invited Speaker. Sustaining Our Underwater World through Collaborations between Divers and Scientists. Special Event hosted by the Miami Waterkeeper and GlobalSubDive aboard the r/v *Baseline Explorer*, Pier 66, Ft Lauderdale FL, March 22, 2016.
92. Invited Speaker. Leveraging 21st century technology to build effective groundwater models for water resources management in California. FEFLOW Groundwater Modeling Workshop: *Current Groundwater Issues in California, Advanced Groundwater Model Features & Capabilities with FEFLOW*, Sacramento CA, October 8, 2015.
91. Invited Speaker. Project Baseline – The role of diver/scientist collaboration in aquatic conservation and an example of success at Wakulla Springs Florida. Special Event hosted by the Los Angeles Area Underwater Explorers, Hollywood CA, May 2015.
90. Invited Speaker. The Hydrologic Cycle & Groundwater, *a hands-on lecture with groundwater simulator*. Guest teacher. Trainer Middle School – 8<sup>th</sup> Grade class. Reno NV, March 2015.
89. Invited Speaker. Leveraging 21st century technology to build effective groundwater models for water resources management in California. AGWA-AGWT Annual Conference: *Everything Aquifers and Groundwater Management*, Ontario CA, February 9, 2015.
88. Invited Speaker. Project Baseline – The 2014 Transatlantic Mission aboard the *Pacific Provider*. Global Underwater Explorers 2014 Global Diving Conference, High Springs FL, December 2014.
87. Invited Speaker. Project Baseline – The role of diver/scientist collaboration in aquatic conservation and an example of success at Wakulla Springs Florida. Special Meeting with *Mission Blue*, Alameda CA, October 2014.
86. Invited Speaker. Modeling Methods for the Karstic Floridan: Consequences of inappropriate groundwater models and assumptions. American Groundwater Trust (AGWT) Conference: *Managing Florida’s Aquifers*, Orlando FL, September 8, 2014.
85. Invited Speaker. Karst Hydrogeology in Florida & Implications for Water Resources Management. Florida A&M University College of Law, Orlando FL, August 10, 2014.
84. Invited Speaker. Project Baseline – The role of diver/scientist collaboration in aquatic conservation and an example of success at Wakulla Springs Florida. Special Event hosted by Ph.D. Candidate Joana Boavida and the Center of Marine Sciences – Univ. of the Algarve, Faro Portugal, July 2014.
83. Invited Speaker. Project Baseline – The role of diver/scientist collaboration in aquatic conservation and an example of success at Wakulla Springs Florida. Special Event hosted by Dr. Pedro Ribeiro and the Institute of Marine Research and the Department of Oceanography and Fisheries of the University of the Azores (IMAR/DOP-UAç), Horta, Azores Portugal, June 2014.
82. Invited Presentation. Limitations of Equivalent Porous Media Models when Applied to the Karstic Upper Floridan Aquifer & Path Forward: Examples from the 2008 North Florida Model & the 2008 Hybrid Western Santa Fe Basin Model. Florida Dep. of Environmental Protection, Suwannee River, St. Johns River, and Southwest FL Water Man. Districts, Live Oak FL, May 22, 2014.
81. Invited Speaker. The simulation of conduit/matrix flow in the karstic Floridan aquifer. FEFLOW Groundwater Modeling Workshop: *State-of-the-Art Groundwater Modeling for Water Resources Management and Wellhead Protection*, Denver CO, May 8, 2014.
80. Invited Speaker. Project Baseline – The role of diver/scientist collaboration in aquatic conservation and an example of success at Wakulla Springs Florida. Special Event hosted by Dr. Brian Lapointe and the Harbor Branch Oceanographic Institute, Ft. Pierce FL, May 6, 2014.
79. Invited Speaker. Project Baseline Progress Report & Workshop. Global Underwater Explorers 2013 Global Diving Conference, Portimao Portugal, December 2013.
78. Invited Speaker. Springs, Karst, & Contamination. Ideas (Intellectual Decisions on Environmental Awareness Solutions) – University of Central Florida Chapter, Orlando FL, November 7, 2013.
77. Invited Speaker. Source of the Spring Flows, Conduit Flow in the Floridan Aquifer, Implications for Wekiwa Springs. Speak Up Wekiva Part II, Orlando FL, August 17, 2013.
76. Invited Speaker. Sustaining the Floridan Aquifer. Sustainable Water Resources Roundtable: Putting Sustainable Water Management to the Test, Wakulla Springs FL, March 6, 2013.
75. Invited Speaker. Project Baseline, a Global Conservation Initiative to Protect Underwater Environs. Special Presentation hosted by the Microsoft Corporation, Redmond WA, December 2012.

74. Invited Speaker. Modeling Springsheds and Spring Vulnerability in the Karstic Floridan Aquifer. Florida Dep. of Env. Protection & Florida Geological Survey, Tallahassee FL, Nov 16, 2012.
73. Invited Speaker. Project Baseline Progress Report & Workshop. Global Underwater Explorers 2012 Global Diving Conference, Avalon Catalina CA, September 2012.
72. Invited Speaker. How Much is Too Much? Toward A Water Budget Approach to Management. Citrus County Board of County Commissioners Meeting, Lecanto FL, December 13, 2011.
71. Invited Speaker. Project Baseline Progress Report & Workshop. Global Underwater Explorers 2011 Global Diving Conference, Kiel Germany, November 2011.
70. Invited Speaker. How Much is Too Much? Toward A Water Budget Approach to Management. Minimum Flows & Levels Workshop, Lecanto FL, October 26, 2011.
69. Invited Speaker: Where's the Water Come From? Toward a Water budget for Wakulla Spring. Wakulla County Board of County Commissioners Meeting, Crawfordville FL, August 2011.
68. Invited Speaker. How Much is Too Much? Toward A Water Budget Approach to Management. First Annual Florida Springs Restoration Workshop, Otter Springs FL, March 21, 2011.
67. Invited Speaker. Project Baseline, A Conservation Initiative for Divers. Special Event hosted by Patagonia Inc, Reno NV, March 19, 2011.
66. Invited Speaker. Modeling Karstic Controls on Watershed-Scale Groundwater Flow in the Floridan Aquifer of North Florida. Texas Groundwater Development Board, Austin TX, February 17, 2011.
65. 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 TX, February 16, 2011. Karst Conservation Initiative, University of Texas, Austin TX, Feb. 17, 2011.
64. Invited Speaker. Understanding Florida's Karst: Results & Lessons Learned from the Woodville Karst Plain Research. Wakulla springs Working Group, Tallahassee FL, November 2010.
63. 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.
62. Invited Speaker. Project Baseline Workshop. Global Underwater Explorers 2010 Global Diving Conference, Playa Del Carmen Mexico, October 2010.
61. Invited Speaker. Project Baseline, A Conservation Initiative for Divers. Meeting of the Reef Raiders Dive Club, Guantanamo Bay Cuba, January 2010.
60. Invited Speaker. Project Baseline, A Conservation Initiative for GUE. Global Underwater Explorers 2009 Global Diving Conference, Gainesville FL, November 2009.
59. Field Trip Leader. Karst Hydrogeology of Florida's Santa Fe River Basin. Global Underwater Explorers 2009 Global Diving Conference, Gainesville FL, November 2009.
58. Invited Speaker. Western Santa Fe River Basin Groundwater Resource Model: Results & Applications. Santa Fe Springs Working Group at Poe Springs FL, September 30, 2009.
57. Project Presentation. Kincaid, T.R., Meyer, B.A., and Radtke, J., 2009. Western Santa Fe River Basin Groundwater Resource Model: Modeling Results & Methods. Suwannee River & St. Johns River Water Man. Dists, USGS, and the Florida Dept. of Env. Protection, High Springs FL, August 3, 2009.
56. Invited Speaker. To Save Wakulla Springs: Future Threats / Future Solutions. Wakulla Wildlife Festival, Wakulla Springs FL, April 4, 2009.
55. Invited Speaker. Spring Creek Tracer Testing Update. Wakulla Springs Working Group, Tallahassee FL, October 2009.
54. Invited Speaker. Global Underwater Explorers – The Next 10 Years. Global Underwater Explorers 2008 Global Diving Conference, Gainesville FL, November 2008.
53. Field Trip Leader. Karst Hydrogeology of the Woodville Karst Plain. American Society of Civil Engineers, Tallahassee FL, September 23, 2008.
52. 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 FL, November 2009.
51. Invited Speaker. Understanding Our Aquifer: Dye Tracing Challenges Conventional Wisdoms. First Int. Conf. on Mining Impacts to the Human and Natural Environs, Port Charlotte FL, Charlotte Harbor National Estuary Program at UGA, and Responsible Growth Man. Coalition, March 2008.



50. Invited Speaker. Assessing Groundwater Impacts, Groundwater Modeling in Karst Aquifers. First Int. Conf. on Mining Impacts to the Human and Natural Environs, Port Charlotte FL, Charlotte Harbor National Estuary Program at UGA, and Responsible Growth Man. Coalition, March 2008.
49. Invited Speaker. Saving Wakulla Spring. Global Underwater Explorers 2007 Global Diving Conference, Budapest Hungary, November 2007.
48. Invited Speaker. Global Underwater Explorers – Approach to Environmental Protection. National Geographic Society, Washington DC, November 2007.
47. Field Trip Leader. Karst Hydrogeology of Florida’s Santa Fe River Basin. Southeastern Geological Society, Gainesville FL, August 2007.
46. Invited Speaker. Groundwater Modeling in Karst: Floridan Aquifer, Woodville Karst Plain, Santa Fe River Basin. University of Florida Water Institute, Gainesville FL, August 2007.
45. Invited Expert Panelist. Future Directions in Karst Research, Karst Waters Institute Symposium, San Antonio TX, May 2007.
44. Invited Speaker. Mysterious Waters: Discovering Connections in the Woodville Karst Plain. Wakulla Wildlife Festival, Wakulla Springs FL, April 2007.
43. 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, Key Biscayne FL, March 2007.
42. Invited Speaker. Water Resource Conservation through Applied Science, Creative Collaborations & Community Outreach. Oregon State University – Institute for Water and Watersheds, Winter Water Film Series, Corvallis OR, March 2007.
41. Field Trip Leader. Karst Hydrogeology of the Woodville Karst Plain. Southeastern Geological Society, Tallahassee FL, December 2006.
40. Field Trip Leader. Karst Hydrogeology of the Woodville Karst Plain and the Santa Fe River Basin, Florida. Global Underwater Explorers 2006 Global Diving Conf, Gainesville FL, November 2006.
39. Invited Speaker. A Hydrogeological Observatory at Wakulla Springs. Global Underwater Explorers 2006 Global Diving Conference, Gainesville FL, November 2006.
38. Invited Speaker. City of Tallahassee Southeast Spray Field Groundwater Tracer Test – Status Report. Wakulla Springs Working Group, Tallahassee, FL, October 16, 2006.
37. Invited Speaker. City of Tallahassee Southeast Spray Field Groundwater Tracer Test – Status Report. Wakulla Springs Working Group, Tallahassee, FL., May 4, 2006.
36. Invited Speaker. Where Does the Water Come From? Mapping Groundwater Flow in the Woodville Karst Plain. Wakulla Wildlife Festival, Wakulla Springs FL, April 2006.
35. 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, Reston VA, January 2006.
34. Invited Speaker. Global Water Resources & GUE. Bay Area Underwater Explorers Inaugural Meeting, San Francisco CA, December 2005.
33. Field Trip Leader. Karst Hydrogeology of the Santa Fe River Basin, Florida. Global Underwater Explorers 2005 Global Diving Conference, Gainesville FL, November 2005.
32. Invited Speaker. Invited Speaker. Global Water Resources & GUE. Global Underwater Explorers 2005 Global Diving Conference, Gainesville FL, November 2005.
31. Invited Speaker. Ames Sink Groundwater Tracer Test – Status Report. Wakulla Springs Working Group, Tallahassee, FL, October 18, 2005.
30. 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, Tallahassee FL, May 2005.
29. Invited Speaker. Where Does the Water Come From? Mapping Groundwater Flow in the Woodville Karst Plain. Wakulla Wildlife Festival, Wakulla Springs FL, April 2005.
28. Invited Speaker. Characterizing the Hydrogeology of the Woodville Karst Plain, North Florida. University of Nevada Reno, Hydrogeology Program Speaker Series, Reno NV, April 2004.
27. Invited Speaker. Where Does the Water Come From? Mapping Groundwater Flow in the Woodville Karst Plain. Wakulla Wildlife Festival, Wakulla Springs FL, April 2004.

26. Speaker & Organizer. Exploring the Secrets of Wakulla Springs – 2004. Town Hall Meeting presenting cave exploration and research in the Wakulla Spring Cave and a discussion of the threats to spring water quality. Big Bend Environmental Forum, Woodville Karst Plain Project, Friends of Wakulla Spring, and the Hydrogeology Consortium. Crawfordville FL, March 2004.
25. Invited Speaker. The Hydrologic Cycle & Groundwater, *a hands-on lecture with groundwater simulator*. Guest teacher. Riversprings Middle School – 8<sup>th</sup> Grade. Crawfordville FL, March 2004.
24. Invited Speaker. The Hydrologic Cycle & Groundwater, *a hands-on lecture with groundwater simulator*. Guest teacher. Shadeville Elementary School – 4<sup>th</sup> Grade. Crawfordville FL, March 2004.
23. Invited Speaker. Deep Beneath Wakulla Springs: Protecting Our Groundwater Resources. Global Underwater Explorers 2003 Global Diving Conference, Gainesville FL, November 2003.
22. Invited Speaker. Where Does the Water Come From? Mapping Groundwater Flow in the Woodville Karst Plain. Wakulla Wildlife Festival, Wakulla Springs FL, April 2003.
21. Invited Speaker. Hydrogeology and Cave Development in the Floridan Aquifer of the Woodville Karst Plain. Special presentation hosted by Friends of Wakulla Springs, Wakulla Spgs FL, March 2003.
20. Invited Speaker. Groundwater Flow & Karst in Florida. Educational event hosted by the Global Underwater Explorers, High Springs FL, September 2002.
19. Invited Expert Panelist: A Workshop to Develop Blue Prints for the Mang. and Protection of Florida's Springs. Hydrogeology Consortium and Florida Dep. of Env. Pro, Tallahassee FL, May 2002.
18. Invited Speaker: Awesome Aquifer Adventure Exhibit: The Basics of Groundwater Flow and Aquifer Protection. Reading Area Public Museum, Reading PA, Monthly Pres: Sep 2001 – Apr 2002.
17. Invited Speaker. Springs, Karst, and Conduit Flow Path: Lessons for Hydrogeologists. Montana State University, Department of Earth Sciences Lecture Series, Bozeman MT, March 2002.
16. Field Trip Leader. Caves and Karst in Florida. National Cave and Karst Research Institute, Tallahassee FL, February 2002.
15. 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 Dept. of Environmental Protection, Tallahassee FL, November, 2001.
14. Invited Speaker. Mechanisms for Groundwater/Surface Water Exchange in the Floridan Karst. Hydrogeology Consortium Speaker Series, Tallahassee, FL, October 2001.
13. Invited Speaker. Geochemical Tracing to Define Groundwater/Surface Water Exchange in the Unconfined Floridan Aquifer. American Chemical Society, Somerset, NJ, February 2001.
12. 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), Ankara, Turkey, December 2000.
11. Invited Speaker. Exploring Underwater Caves in Turkey's Taurus Mountains. Special Event hosted by Atlas Magazine, Istanbul Turkey, December 2000.
10. Invited Speaker. Development of Phreatic Karstic Caves and Groundwater Resource Applications. Shippensburg Univ. Dep. Env. Sciences Distg. Lecturer Series, Shippensburg PA, October 2000.
9. Invited Speaker. Project KarstDive 1996, Underwater Exploration in Southern Turkey, National Speleological Society-Cave Diving Section Annual Workshop Branford FL, May 1997.
8. Invited Speaker. Project KarstDive 1995, Underwater Exploration in Southern Turkey, National Speleological Society-Cave Diving Section Annual Workshop Branford FL, May 1996.
7. Invited Speaker. River Water Intrusion to the Devil's Ear Cave System, National Speleological Society-Cave Diving Section Annual Workshop Branford FL, May 1996.
6. Invited Speaker. Phreatic Karst Development in the Taurus Mountains, Southern Turkey, Wyoming Geological Association, Casper WY, January 1996.
5. Invited Speaker. Groundwater / Surface Water Exchange in the Unconfined Floridan Aquifer, Wyoming Geological Association, Casper WY, January 1996.
4. Invited Speaker. Phreatic Karst Development in the Taurus Mountains, Southern Turkey. Guest Lecture Series, University of Wyoming, Laramie WY, November 1995.
3. 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, Antalya Turkey, September 1995.

2. Invited Speaker. A Closer Look at Silt, National Association for Cave Diving Instructor Workshop, High Springs FL, July 1994.
1. Invited Speaker. Record Exploration at Manatee Spring, National Association for Cave Diving Instructor Workshop, High Springs FL, July 1994.