

Paul A. Rubin

HydroQuest karst background and experience include (see resume for additional detail & publications):

- Karst field training and course work with recognized karst experts including Dr. Arthur N. Palmer, Dr. Stephen J. Egemeier, Dr. Peter Smart, Dr. James Quinlan, and others;
- Forty plus years of extensive caving and karst investigation experience with recognition by the National Speleological Society (made a Fellow of the NSS in recognition of karst research and water resource protection);
- Collaboration and publications with world recognized karst experts including Arthur N. Palmer, Margaret Palmer, and James Quinlan, including five lengthy technical karst guidebook papers. (Dr. Palmer is the most frequently cited karst hydrologist in the world);
- Substantial personal research from 1973 to the present on the characterization, groundwater flow dynamics, and geomorphic history of assorted karst terrains in New York, Maine, Tennessee, Missouri, and Kentucky;
- Over 30 karst publications and conference presentations, including professional geologic guidebook papers and peer-reviewed papers (some papers addressed land-use planning in karst terrains);
- Service as an expert witness in court relative to karst issues, inclusive of a Power Point presentation to a judge (2011) and in a hearing in Florida (Feb. 2014). Wrote report on waste water injection risks to Floridan aquifer.
- Leader or co-leader of professional karst geologic field trips for professional geologists at a New York State, national, and international level, including the NYS Geological Association, American Association of Petroleum Geologists; assorted colleges; New York State Geological Survey geologists including the New York State geologist; the Hudson-Mohawk Professional Geologists' Association, the National Ground Water Association, the National Speleological Society, and the International Association of Geochemists and Cosmochemists;
- Karst hydrologist for Howe Caverns from 2004 to 2007, plus previous karst consulting work with Howe Caverns;
- Developed and documented a conceptual model of karstic groundwater flow at Oak Ridge National Laboratory in TN to assess contaminated groundwater flow where the first atomic bomb was made;
- Numerous consulting jobs focused heavily on environmental karst issues, land-use protection, pipeline issues, and water supply in New York State, Pennsylvania, New Jersey, Virginia, West Virginia, Missouri, and Florida. Authored a major hydrogeologic report for the Town of Mamakating in NYS with emphasis on karst hydrology and water resource protection (complete with major GIS map set);
- Authorship of numerous unpublished consulting karst reports, GIS maps, & affidavits (some pipeline related);
- Provided a technical presentation to a 20-member delegation of engineers and geologists from the **People's Republic of China** addressing potential environmental impacts associated with hydraulic fracturing in karst terrains (January 2014); and
- On-going personal karst research in the Rosendale Binnewater Lakes area with emphasis on the hydrogeology associated with two disappearing lakes, speleogenesis in a complex structural setting, and geomorphic interpretation. Also conducting research designed to document relict geomorphic and flow conditions present in New York State caves beneath warm-based glaciers. Preparing paper and maps for 2018 annual NE Geological Society of America meeting. Board member of the Northeastern Cave Conservancy.