

JONATHAN E. SHAW, PG

Education

MBA – Nova Southeastern University, 1988
MS – Hydrogeology, University of South Florida, 1980
BA – Geology, University of South Florida, 1977



Professional Licenses

Professional Geologist – Florida (#314)

Professional Affiliations

National Ground Water Association
American Association of Professional Geologists

Professional Experience

As a Project Director, Jonathan Shaw is responsible for project implementation and business development in Aquifer Storage and Recovery (ASR), deep injection wells (DIW), and Carbon Sequestration. He has over 40 years of experience in water resources, specifically emphasizing water supply, water quality investigations, hydrogeology, contamination assessment, and remediation. He has worked on Everglades restoration, water supply development, water use permitting, and provides litigation support. Jon is a qualified expert witness in hydrogeology and has testified in federal court and administrative hearings. Water resources experience includes water use permitting, managing projects in support of Everglades restoration, aquifer storage and recovery (ASR), deep injection well permitting, groundwater monitoring, assessment and remediation, and ecotoxicology. He worked with attorneys to help solve complex litigation matters and worked with state legislators in rule writing for water resources and protection of geology licensure.

Mr. Shaw's career includes managing people and businesses while developing regional offices for international consulting firms. He also has worked with the government as Section Leader in Water Use Permitting and as a Principal Hydrogeologist in the Water Resources Evaluation Section of the South Florida Water Management District. He has played significant roles in leadership, having served as Representative on the Palm Beach Wellfield Protection Ordinance Technical Subcommittee, and Chair; as a member of the Palm Beach County Groundwater and Natural Resources Protection Board for twenty-five years, and most recently as an Elected Official on the Palm Beach Soil and Water Conservation District Board.

Notable project work is below.

ASR / Underground Injection Control

SFWMD Lake Okeechobee Watershed Restoration Project (LOWRP) Aquifer Storage and Recovery (ASR) Wells, SFWMD. – Prepared permit application and Engineering Report for Lake Okeechobee Watershed Restoration Project C-38N ASR injection well system. The facility was designed to construct two Class V, Group 7 injection wells and associated dual zone monitoring wells. One Upper

Floridan aquifer injection well was constructed with a 26-inch diameter fiberglass-reinforced plastic (FRP) tubing set to 555 feet bls and a total depth of 850 feet bls. The second Avon Park Permeable Zone injection well was constructed to a depth of 1,380 feet bls. An "Intent to Issue" notice was published on December 20, 2022.

SFWMD Emergency Estuary Protection Wells (EEPW). – Prepared permit application for the construction and testing of a new exploratory well in the Boulder Zone at the Spoil Management Area near Moore Haven, Glades County, Florida. The SFWMD investigated the use of emergency estuary protection wells (EEPW), as a water management tool to relieve coastal estuaries during high discharge events while protecting water quality, endangered species, and water supply.

SFWMD Lake Okeechobee Watershed Restoration Project (LOWRP) Aquifer Storage and Recovery (ASR) Wells -Managed Mechanical Integrity Testing (MIT) for L-63N ASR Well in Okeechobee, Florida. The purpose was to assess the conditions of an existing 1600-foot ASR well using CTVSL followed by clearing of the 24-inch open hole of a lost XY caliper tool with cable, lost PVC drop pipe, fill, and rust. This was followed by a pressure test of on the 24-inch diameter steel casing to confirm its integrity. Following confirmation of casing stability, a step-rate pumping test was conducted to determine well capacity. A new wellhead was constructed and the site restored.

FPL West County Energy Center, Palm Beach County, Florida. Project manager hydrogeologic investigation of a new power plant sited in western Palm Beach County, Florida. Responsible for the preparation of Underground Injection Control application for deep injection wells required to dispose of cooling tower blowdown water for the 2,450-megawatt (MW) at the West County Energy Center. This project involved the licensing of two 3-on-1 combined-cycle units using three MHI 501G 250-MW combustion turbines (CTs) with associated heat recovery steam generators (HRSGs), and a 440-MW steam turbine. A Class I Exploratory Well application was included in the Site Certification Application (SCA), as well as being submitted to the Florida Department of Environmental Protection.

ASR pilot study, Hillsboro Canal Site, Palm Beach County, Florida, SFWMD. Task Leader for a hydrogeologic investigation of an Aquifer Storage and Recovery well located in western Palm Beach, County. As part of the Comprehensive Everglades Restoration (CERP), over 300 ASR were proposed. Three pilot projects were selected to evaluate the impact of such a large-scale effort. The Hillsboro ASR Pilot Study is located at the south end of Water Conservation 1 and plays a key role in Everglades restoration along the lower east coast of Florida.

Palm Beach County System 3 Multipurpose ASR well, Palm Beach County Water Utilities. Provided hydrogeologic expertise for the reviewed hydrogeologic information and prepared a well design for an Upper Floridan aquifer ASR well. The well was 16-inch diameter cased to 1,050 feet below land surface with open hole to 1,500 feet below land surface and designed for 3 MGD during injection. Cycle testing was also conducted.

Hillsboro East ASR facility, Palm Beach County Water Utilities Department. Provided permitting services for the A Class V, Type 7 Deep Injection Well Permit application was prepared for submittal to the UIC section of the Southeast District of the Florida Department of Environmental Protection.

Hillsboro ASR Pilot Project, SFWMD. Project Manager for the preparation of a monitoring plan to meet the overall needs of the CERP Hillsboro ASR Pilot project. The plan provided the methodologies, sampling location and frequency and quality assurance/quality control for all monitoring conducted at the site. Project monitoring requirements originated from several sources including permits, planning documents, and the desire to test the engineering and hydrogeological capabilities of the ASR system. As a result of this being a pilot project, it was the intention to collect a relatively extensive amount of information in a limited amount of time.

Permitting

Miami-Dade Water and Sewer Department, Water Use Permit. Responsible for application review and preparation of the major modification of their water use permit. Elements include: Alternative Water Supply, population assessment and per capita water use, water loss, and reclaimed water availability for Biscayne Bay Coastal Wetlands Rehydration.

Floridian Natural Gas Storage Company, LLC (FGS) facility, Indiantown, Martin County, Florida. Responsible for the water use permitting of the Floridian Natural Gas Storage Company facility. The project is located on approximately 145 acres at the site of the former Florida Steel manufacturing facility. The site was designated as an EPA Superfund site and although remediation is ongoing, the site had been declared ready for reuse by the U.S. Environmental Protection Agency (EPA).

Gerdau Ameristeel Facility, Baldwin, Florida. Project manager for the water use permitting of the Gerdau Ameristeel facility. Gerdau is one of the largest steel production companies in North America and the Baldwin mill is located in western Duval County on 600 acres of land. Based upon the permit application, the St. Johns River Water Management District authorized the use of approximately 9 million gallons per year of groundwater from the upper Floridan aquifer for domestic use, 136 million gallons per year for groundwater from the upper Floridan aquifer, an unrestricted amount of stormwater from an onsite stormwater holding basin for commercial/industrial use, and 2.5 million gallons per day of groundwater from the Floridan aquifer for firefighting.

City of Hollywood Public Utilities, Hollywood, Florida. Task Manager for a reclaimed water study for a public utility located in Broward County, Florida, located on the Atlantic coast. The utility uses a series of 27 water supply wells from the Biscayne Aquifer. The well field was highly susceptible to saltwater intrusion, especially during drought events. A study was conducted to evaluate the feasibility of injecting reclaimed water into the shallow aquifer through a linear array of injection wells to form a freshwater barrier to prevent salt-water intrusion. A modeling study using MODFLOW, SUTRA and MODPATH was used to predict the movement of the freshwater salt-water interface.

City of Hollywood Public Utilities, Hollywood, Florida. Project Manager for a consumptive water use analysis for a public utility located in Broward County, Florida. A groundwater flow model was conducted to evaluate the impacts to the groundwater system due to increased withdrawal rates. Key issues evaluated were the potential to cause salt-water intrusion, effects on nearby canal stages and impacts to wetlands. A Consumptive Water Use Permit Application was prepared to increase groundwater withdrawal to 17 million gallons per day.

Home Tower Condominium, Hollywood, Florida. Project manager for a water use permit for the Home Tower Condominium, a 14-story residential and commercial high-rise in Hollywood, Florida, that uses groundwater from the Biscayne aquifer for air conditioning cooling water. Home Tower had been withdrawing groundwater via three 8-inch turbine pumps for over 40 years without a water use permit. Under enforcement, Mr. Shaw was able to obtain the necessary water use permits, without incurring a fine, for withdrawal of an annual allocation of 438 million gallons from the Biscayne.

Southeast Renewable Fuels (SRF), Martin County, Florida. Provided water resources permitting services for a renewable energy plant in Martin County, Florida. Evaluated conversion of agricultural land to include a biofuels plant. SRF planned to develop Sweet Sorghum to Ethanol plants in south Florida. Met with the South Florida Water Management District permitting staff to discuss water supply issues including: swapping agricultural water supply already allocated to industrial use;

impacts to and mitigation of wetlands; both groundwater and surface water supply sources; and canal modifications to minimize adverse impacts from water use.

Ag-Diesel, Palm Beach County, Florida. Provided water use, land-use, and other permitting services for a South Florida agricultural renewable energy company with a significant interest in jatropha. Ag-Diesel planned on utilizing farmland in western Palm Beach County to develop a pilot-scale refinery designed to process algae and non-food oilseed crops such as jatropha, a bush that yields a high oil content. The refinery would convert the crops into pure biofuel (B100).

Palm Beach International Airport, West Palm Beach, Florida. Task Leader for an Environmental Impact Statement prepared for the Federal Aviation Administration for proposed improvements to Palm Beach International Airport that required environmental analysis, coordination, and documentation in conformance with the provisions of the National Environmental Policy Act and the Federal Aviation Administration Airport Environmental Handbook Order 5050.4A. Directed activities including field investigations and report preparation for water resources, floodplains, soils, biotic communities, wetlands, and threatened and endangered species.

Everglades Restoration

Everglades Construction Project (ECP), SFWMD. Project Manager for a general services contract for the SFWMD to provide professional engineering services to assist the District in Everglades restoration. Services included: design review of ECP elements, planning studies, detailed engineering design, and structural inspection, as needed. Assisted the SFWMD with hydrogeologic studies, hydrology and hydraulic analyses, environmental assessments, water quality studies, project feasibility evaluations, cost benefit analyses, conceptual, preliminary of final designs, site development and construction support.

South Florida Water Management District, Eight and One-Half Mile Area. Project Manager for a land use planning study key to the restoration of the Everglades in southwest Miami-Dade County. Facilitated a team of consultants and representatives from the Everglades National Park (ENP), South Florida Water Management District, Metro-Dade County Department of Environmental Resources Management, Florida Department of Environmental Protection, and the United States Fish and Wildlife Service. Goals and objectives were set to develop alternatives to the U.S. Army Corps of Engineers Modified Water Deliveries Project for Everglades National Park. Seven alternatives were developed that considered hydropattern restoration, return of seepage water to ENP, water quality impacts, flood protection, cost, and minimization of relocation of residents. The alternatives included, No Action, modifications of the levee system and pumping scenarios, creation of flow ways, a seepage barrier, and a total buyout costing \$112 million.

Everglades Construction Project (ECP), Nutrient Removal Test Cells, SFWMD. Task Leader for the development of plans and specifications for modifications to the Everglades Nutrient Removal Project Wetland Research Test Cells. Due to excessive seepage, nutrient studies in the test cells could not achieve proper mass balance. A study was conducted to determine what modifications would reduce seepage to within the allowable criteria. The results indicated that modification of the existing levees, replacement of the water distribution system, and the lining of the test cells with a high-density polyethylene liner, was needed.

Everglades Construction Project (ECP), Phosphorus Removal Technologies, SFWMD. Project Director for an Everglades research project to evaluate the costs of alternative treatment technologies. Nine technologies were evaluated for the removal of phosphorus from agricultural runoff from approximately 150 parts per billion (ppb) to approximately 10 ppb. Several pilot projects were

conducted to evaluate the feasibility of treating water entering the Everglades Protection Area. This desktop study was conducted to determine the range of full-scale implementation costs.

Regional Aquifer Storage and Recovery Study. Project Manager for Phases 1 and 2 of an ASR ecotoxicology program to be used in preparation of a future regional-scale ecological risk assessment (ERA). During Phase I, a study of the ecotoxicological effects of various mixtures of treated surface water and native ground water collected from the Caloosahatchee ASR Pilot Project area, was conducted. The Phase I study included: acquisition and storage of site surface water and native ground water; bench-scale ASR system to produce "recovered" water; range-finding toxicity tests of mixtures of native ground water, surface water, and "recovered" water; proposed laboratory organisms and test conditions for testing the toxicity and bioconcentration potential of the ions present in surface water, native ground water, and "recovered" water; and prepared a report interpreting results and proposing methodologies for future studies. Phase 2 was conducted to evaluate methodologies at an existing ASR and initiate the ERA process.

Water Supply / Water Resources

Saltwater Intrusion Mapping, South Florida Water Management District. Directed the saltwater interface monitoring program for the SFWMD used to evaluate the extent of seawater encroachment into aquifers along the South Florida coastline. Water quality (e.g., chlorides, total dissolved solids, specific conductance) data are collected and analyzed every 5 years, and the saltwater interface is mapped for the SAS (including the Biscayne aquifer) on the east coast of Florida, and for the Water Table, Lower Tamiami, Sandstone, and Mid-Hawthorn aquifers on the west coast. SFWMD regulatory staff use the mapped position of the saltwater interface as part of the water use permitting review process. Coastal utilities also use these maps to monitor for potential impacts to public supply wellfields and must plan accordingly. Chloride data from more than 1,000 wells was used to create the 2019 saltwater interface maps.

Regional Aquifer Storage and Recovery Study, East Coast FAS Phase 2 Model, SFWMD. Mr. Shaw, an expert on the Floridan Aquifer System (FAS), served as Program Manager for the development, calibration, and validation of the East Coast FAS Phase 2 Model for the South Florida Water Management District. The Phase 2 modeling included: incorporating the calibrated Phase 1 Model into the new and larger model domain; recalibrating the new and larger Phase 2 Model; and, preparing a model documentation report of the entire effort. The model domain included all or parts of Okeechobee, Indian River, St. Lucie, Martin, Palm Beach, Broward, and Miami-Dade Counties, Florida. The model included 14 layers and simulated the FAS only. The deeper "Boulder Zone" was simulated assuming constant head and constant concentration. Similarly, the Surficial Aquifer System (SAS) was simulated assuming an average aquifer head and a constant concentration. The work resulted in a final 2005 calibrated model simulating the complex FAS in southern Florida. The model provided the SFWMD with a reasonable tool for simulating current and future water supply projects within the model domain.

Lower East Coast Planning Area, Production Zone Mapping, SFWMD. Task Manager for a study of the development potential of the Upper Floridan aquifer in the Lower East Coast Planning Area for the SFWMD. Conducted a desktop investigation by performing: an intensive literature search for hydrogeologic and engineering parameters, a hydrogeologic data evaluation, development of a tabular database, data interpretation, digitization of contoured data into a geographic information system, and an evaluation of the Upper Floridan aquifer development potential and economic analysis. Maps of producing zones within the Upper Floridan aquifer were prepared and delineated the occurrence of four producing zones throughout south Florida.

Point of Americas Condominium, Ft. Lauderdale, Florida. Project manager for a conceptual plan and ground water model for an air conditioning return flow injection well system. In lieu of an ocean outfall for the air conditioning return flow from four high-rise residential towers in Ft. Lauderdale, Florida, a conceptual model was developed to evaluate the feasibility of injecting into the shallow aquifer. Specific capacity tests were conducted in a 16-inch diameter test hole drilled to a depth of 200 ft. at the same location where the injection well was being proposed to verify required disposal injection rates. The results of the modeling effort indicated due to the limited areal extent of the property and the fact that the supply wells were on the same property as the injection wells, that the volume of water withdrawn/recharged would cause recirculation resulting in an inefficient heating ventilation air conditioning system.

Addison Reserve, Golf Course Irrigation Supply, Delray Beach, Florida. Project Hydrogeologist for a new residential/golf course community located in Delray Beach, Florida. Responsible for all aspects of irrigation water supply for two new 18-hole Fazio golf courses for a new community. Installed two, 12-inch water supply wells and performed all required testing and permitting.

Confidential Client, Phosphate District, Florida. Field Hydrogeologist for an extensive hydrogeologic investigation of a potential phosphate mine in central Florida. A drilling and aquifer-testing program was undertaken that involved over 8000 feet of drilling at 28 locations. Seven drill rigs completed the drilling in two months. Forty-eight pumping tests were performed to assess the aquifer characteristics from ground surface to 1,050 feet below ground surface. Sixteen shallow aquifer wells were installed. Six lower Floridan aquifer wells were installed and ranged from 870 to 1,050 feet deep. Five upper Floridan wells were also installed to a depth of approximately 350 feet. Borehole geophysical logging was conducted and a borehole camera log was conducted in the production well. A large-scale pumping test of the lower Floridan Aquifer was for seven days at a constant rate of 5080 gallons per minute. Transmissivity in the lower Floridan aquifer was calculated to be 57,500,000 gallons per day per foot with a storage coefficient of 0.0004.

The Breakers Hotel, Golf Course Irrigation Supply, Palm Beach, Florida. Project Manager for the evaluation of the freshwater lens for irrigation purposes at The Breakers Hotel located in Palm Beach, Florida. Historically, The Breakers golf course used treated water piped from across the Intracoastal Waterway by the City of West Palm Beach, for irrigation. As prices increased, The Breakers conducted an evaluation of the freshwater lens on the barrier island using monitoring wells and an electromagnetic survey to evaluate subsurface resistivity. Once it was determined that a freshwater lens was present, a 500-foot horizontal, groundwater recovery well was installed to evaluate the quality of water available for irrigation from the surficial aquifer. The aquifer performance test demonstrated that the fresh water lens consistently yielded 250 gallons per minute with no degradation of water quality.

Turnpike Aquifer Investigation, Palm Beach County, SFWMD. Project Geologist for an extensive evaluation of the surficial aquifer in Palm Beach County, also known as the Turnpike Aquifer or Zone of Secondary Permeability. Supervised the drilling, geologic logging, aquifer testing, and water quality testing of 15 geologic test holes in excess of 100 feet in depth.

Port St. Lucie Utility Systems, Water Supply Investigation, Port, St. Lucie, Florida. Project Manager for the well construction, testing, and water supply permitting of four Floridan Aquifer production wells for a water utility located in St. Lucie, Florida. Prepared contract documents including bid proposal price form, bidder questionnaire, and well construction specifications for four 16-inch diameter wells drilled to 900 feet below land surface. Detailed hydrogeologic testing was performed to determine aquifer characteristics to maximize the potential usage of the Floridan aquifer for water supply. Expansion of the Floridan aquifer well field was planned to an ultimate capacity of 12 MGD.

Flagler County Utilities, Water Supply Investigation, Flagler County, Florida. Project Manager for a hydrogeologic investigation for a utility located in Flagler County, Florida. Five new Floridan aquifer wells were installed with a total capacity of 6 million gallons per day. Aquifer performance tests were conducted to determine aquifer characteristics and to evaluate the effects on the shallow aquifer well field and the potential for salt-water intrusion. A Water Use Permit Application was completed to support the well field expansion and additional water withdrawal for the utility.

DeSoto County Generating Company, Water Supply, Desoto County, Florida. Project Manager for the installation, testing, and permitting of two Floridan aquifer wells to provide water for the power plant. Well specifications were developed and bids evaluated for construction and testing of two, 12-inch Floridan aquifer wells approximately 1,000 feet deep. Wells were installed within approximately two weeks and aquifer performance tests were performed on each well. The wells significantly exceed the pumpage requirements under the contract.

Water Quality

Science and Technology STS Contract, SFWMD. Project Manager for performing water quality monitoring for eight SFWMD sampling projects as part of the Science and Technology STS Contract. Various surface water, groundwater, biological and sediment sampling was performed throughout the State, assessed, and monitored to obtain accurate, verified monitoring data to fulfill District legal mandates and support operational decisions. The eight projects managed under this contract were: 1) C4IP Emergency Impoundment - monitoring water quality to determine the total phosphorus mass balance within the C-4 Impoundment; 2) Lake Okeechobee Critical Project (LOCP) - monitoring and sampling the groundwater from a system of surficial aquifer wells and also collects water level measurements; 3) L8 Reservoir Testing (L8RT) - collection of groundwater quality monitoring data from surface and groundwater locations to support the Palm Beach Aggregates Project; 4) Everglades Stormwater Program (ESP) - collection of stormwater quality monitoring and surface water samples at 14 locations in Palm Beach and Broward County; 5) Emergency Monitoring Support (EMS) - collection of ambient water, groundwater, rain data, and biological samples during storm events; 6) RAIN - collection and sample processing of atmospheric deposition samples; 7) Regional Floridan Monitoring Project (RFGW) - quarterly groundwater quality monitoring which included measurements from 60 monitoring wells at thirty-one locations; and 8) Upper East Coast Floridan (UECF) - quarterly collection of groundwater quality from eight Floridan aquifer wells.

Quality Assurance (QA) Field Sampling Audits, Lead Auditor, SFWMD. Project Manager and Lead Auditor for Quality Assurance (QA) Field Sampling Audits for the SFWMD under the Everglades Agricultural Area (EAA) Regulatory Program, Rule 40E-63, F.A.C. Under the EAA program, the private landowners that discharge into the surface water of the District must determine the concentrations of total phosphorus being discharged from their properties. Mr. Shaw performed QA field audits and split sampling of water quality samples. Samples were submitted to the District's laboratory for phosphorus analysis.

SFWMD Water Quality Sampling Program. Supervisor for eleven surface water quality monitoring programs. Directed the sampling of over 160 water quality stations for the collection and analysis of nutrients, major ions, trace metals, and pesticides in surface water canals and water control structure throughout south Florida.

The Breakers Hotel, Water Management Plan, Palm Beach, Florida. Task Manager for a Preliminary Water Quality Investigation to develop a Water Management Plan for The Breakers Hotel located on Palm Beach, Florida. An evaluation of the surficial aquifer was conducted through the installation and testing of two intermediate depth monitor wells. The wells were designed to measure the effect of golf course irrigation pumping from on-site lakes and the encroachment of saltwater from the

Intracoastal Waterway. A decision matrix was developed to evaluate alternatives for water supply such as effluent reuse, Floridan well blending, horizontal wells, and lining of the lakes.

Select Publications and Presentations

Publications

Shaw, J.E., 1980. "Anionic Nutrients in Ground Water at a Spray Irrigation Site," Tampa, Florida, Unpublished Thesis, 70 pp.

Shaw, J.E., 1980. Hydrogeologic Investigations along Eastern Portions of Lake Okeechobee, South Florida Water Management District, Technical Memorandum, DRE-105, 40 pp.

Shaw, J.E. and S.M. Trost, 1981. Hydrogeologic Characteristics of the Floridan Aquifer in the Kissimmee Planning Area Using Geologic and Geophysical Logs, Abstract, Florida Scientist, Vol. 44, No. 1, p. 40.

Shaw, J.E., 1983. Hydrostratigraphy of the Kissimmee Planning Area Using Geophysical Techniques, NWWA Ground Water Technology Division 1983 Education Session, Preprint.

Shaw, J.E., 1983. Hydrostratigraphy of the Kissimmee Planning Area Using Geophysical Techniques, Abstract, Ground Water, Vol. 21, No. 4, p. 57.

Knapp, Michael S., J.E. Shaw and S.M. Trost, 1983. Hydrogeologic Framework of Southern Florida, Abstract, Southeastern Geological Society of America, Abstracts with programs 1983, Vol. 15, No. 2, p. 59.

Shaw, J.E. and S.M. Trost, 1984. Hydrogeology of the Kissimmee Planning Area, South Florida Water Management District, Technical Publication 84-1, 235 pp., Appendices.

Shaw, J.E., 1985. Preliminary Evaluation of the Hydrologic Data Collected from the C 103 Basin, Dade County, Florida, South Florida Water Management District, Technical Memorandum.

Germain, Guy J. and J E. Shaw, 1988. Surface Water Quality Monitoring Network, South Florida Water Management District, Technical Publication 88-3.

Herr, Jeffrey W. and J.E. Shaw, 1989. Ground Water Quality of the South Florida Water Management District, Technical Publication 89-1.

Wedderburn, Leslie A., S.M. Trost and J.E. Shaw, Environmentally Compatible Aquifer Management in South Florida, Proceedings, International Conference on Advances in Ground-Water Hydrology, American Institute of Hydrology, 1988.

Shaw, J.E., Keith R. Smith, and N.A. Sawka, 1991, Development Potential of the Floridan Aquifer in Southeastern Florida Using Reverse Osmosis Treatment, Abstract, Florida Scientist, Vol. 54, p. 27.

Regensburger, E.R. and J.E. Shaw, Groundwater Flow and Solute Transport Modeling of Shallow Recharge in the Biscayne Aquifer, Hollywood, Florida, Proceedings of the 1992 Solving Ground Water Problems with Models Conference, Ground Water Management Book 9, p. 537-551.

Shaw, J.E. with R.S. Murali, A. Malefatto and S. Benyon, Emerging Issues in Groundwater Cleanup and Regulatory Compliance, Seventh Annual Environmental Permitting Summer School, The Florida Bar, pp. 707-722.

Shaw, J.E. and L.J. Ullman, 2005, Enhanced Bioremediation for Hot Spot Cleanup of Volatile Organic Compounds, Remediation Conference, National Ground Water Association, Proceedings.

Shaw, Jonathan. 2006. Current Studies on Aquifer Storage and Recovery for Everglades Restoration. Environmental and Land Use Law Annual Update, August. Amelia Island.

Johnson, Isabel and Jonathan Shaw. 2006. Ecotoxicology Studies to Establish Bioaccumulation Impacts on Freshwater Fauna Using Recharge Water From Operational ASR Systems. Aquifer Storage and Recovery Forum VI, October. Orlando.

Shaw, Jonathan. 2008. Underground Injection Control-Deep Injection Wells. Environmental & Land Use Law Update, August. Amelia Island.

Shaw, Jonathan and William Brumund. 2008. Ethical Issues for Technical Expert Witnesses. Ethical Challenges for the Environmental Lawyer and Consultant, November. Amelia Island.

Shaw, Jonathan. 2017. Evaluation of Pre-Construction Water Level Data for Southern Corkscrew Regional Ecosystem Watershed (CREW) Restoration Project, CERPRI Permit:0279719-004, Specific Condition:20 – Hydrological Monitoring Plan.

Shaw, Jonathan. 2019. Evaluation of Post-Construction Water Level Data for Southern Corkscrew Regional Ecosystem Watershed (CREW) Restoration Project Year 1 (2018-2019), CERPRI Permit:0279719-004, Specific Condition:20 – Hydrological Monitoring Plan.

Shaw, Jonathan. 2019. Estimated Position of the Saltwater Interface, SFWMD, Technical Map Series (8 plates).

Shaw, Jonathan and E. Geddes. 2020. Hydrogeology of the Floridan Aquifer System at a C-24 Canal Test Site in St. Lucie County, Florida, SFWMD, Technical Publication WS-51, 91 pp.

Shaw, Jonathan. 2020. Evaluation of Post-Construction Water Level Data for Southern Corkscrew Regional Ecosystem Watershed (CREW) Restoration Project Year 2 (2019-2020), CERPRI Permit:0279719-004, Specific Condition:20 – Hydrological Monitoring Plan.

Shaw, Jonathan. 2020. Miami-Dade County Stormwater Detention Area Hydrogeologic Investigation, SFWMD Technical Publication WS-56, 126 pp.

Shaw, Jonathan and M. Zamorano. 2020. Saltwater Interface Monitoring and Mapping Program, SFWMD Technical Publication WS-58, 29pp.

Presentations

Fourteenth Annual Water Resources Conference, June 20, 1979, "Migration of Wastes in Ground Water at a Spray Irrigation Field", Lake Buena Vista, Florida.

Florida Academy of Sciences, 44th Annual Meeting, May 1, 1981, "Hydrogeologic Characteristics of the Floridan Aquifer in the KPA Using Geologic and Geophysical Logs", Orlando, Florida.

Hydraulics Division of the American Society of Civil Engineers Specialty Conference, August 14, 1985, "Monitoring Well Inventory Using Database Development Software", Orlando, Florida.

Palm Beach County Water Quality Symposium, June 6, 1989, "Water Availability from the Floridan Aquifer Using Reverse Osmosis Treatment", West Palm Beach, Florida.

Fundamentals of Groundwater Contamination Management for Environmental Professionals in Industry, Course Instructor, National Ground Water Association; November 14, 1990 to November 16, 1990 - Orlando, Florida; September 24, 1991 to September 24, 1991, Seattle, Washington; and December 3, 1991 to December 5, 1991, Denver, Colorado.

Seventh Annual Environmental Permitting Summer School, Emerging Issues in Groundwater Cleanup and Regulatory Compliance; with R.S. Murali, Al Malefatto, and Scott Benyon, The Florida Bar, Marco Island, Florida, July 14, 1993 to July 16, 1993.

South Florida Water Management District, Governing Board, Alternative Land-Use Analysis for the 8.5 Square Mile Area, West Palm Beach, Florida, September 1998.

Project Management Plan – ASR Pilot Projects, South Florida Water Management District and the U.S. Army Corps of Engineers, Characterizing Aquifers for ASR and Supply Development – Transferring Technologies for the CERP, West Palm Beach, Florida, January 26, 2001.

Johnson, I. and J.E. Shaw, Ecotoxicology Studies to Establish Bioaccumulation Impacts on Freshwater Fauna Using Recharge Waters From Operational ASR Systems, Aquifer Storage and Recovery – Forum VI, Orlando, Florida, October 17, 2006.

Current Studies on Aquifer Storage and Recovery for Everglades Restoration, Environmental & Land Use Law Annual Update, Amelia Island, Florida, August 25, 2006.

Underground Injection Control – Deep Injection Wells, Environmental & Land Use Law Annual Update, Amelia Island, Florida, August 26, 2007.

Class I Deep Injection Wells. Presentation to Mosaic, December 2011.

Update on South Florida Water Management District ASR Projects, Managing Florida's Aquifer Conference, American Groundwater Trust, Orlando, FL, September 2019.

Five-Year Saltwater Intrusion Mapping Update. Broward County Water Resources Technical Advisory Committee, October 2019.

Saltwater Intrusion Mapping – Palm Beach County. Palm Beach County Water Resources Task Force, December 2019.

Five-Year Saltwater Intrusion Mapping Update. Groundwater Management Districts Association, Annual Winter Conference, Ft. Lauderdale, FL, January 2020.

Five-Year Saltwater Intrusion Mapping Update. Lower West Coast Regional Groundwater Models Surficial and Intermediate Aquifer System Model, LWC Water Supply Task Force, July 2020.