

JOHN M. DUMEYER, P.E., P.G.
Senior Water-Resource Engineer

FIELDS OF SPECIALIZATION

- Water Resource Engineering
- Groundwater/Surface Water Investigations
- Groundwater Development
- Groundwater Flow Models
- Remedial Action Planning and Design
- Environmental Construction Management
- Interaction with Regulatory Agencies
- Management of Multi-Site Projects and Programs

EDUCATION

- M.S. Hydrology - University of Arizona
- B.S. Geology - University of Arizona

PROFESSIONAL CERTIFICATIONS

- Registered Professional Engineer, Florida,
- Registered Professional Geologist, Florida

EXPERIENCE SUMMARY

Mr. Dumeyer is a consulting engineer in Tampa, Florida. He is a registered professional engineer and professional geologist with more than 46 years of experience in hydrology, hydrogeology, and environmental engineering. Mr. Dumeyer previously served as a Hydrologist and Water Resource Engineer for the U.S. Geological Survey and the State of Colorado. His specific studies included evaluation of existing large-capacity wells and calculating well depletion effects on surface water flows.

Evaluation and research of natural treatment of wastewater for aquifer recharge

Development and testing of irrigation and public supply wells from 100 to 4000 gpm

Development of groundwater flow models for areas up to 5000 square miles

Project manager for design and construction of 3,200-foot Class I injection well in Margate, Florida.

Permitting and construction of aquifer recharge well systems

Project Engineer for the permitting and construction of a test recharge well at a large power plant in Polk County. The permitting included SWFWMD approval for the recharge of naturally-treated water into the Floridan Aquifer for later withdrawal at other well locations on the plant site. A further development for this project included construction and testing of two production wells to supply the groundwater needs for the plant and to be used to recover future recharged water.

Another portion of the permitting process for the test recharge well at the power plant included the development of a groundwater transport model to evaluate migration of the recharged water. The model evaluation extended over a 10-year time period to determine that the recharged water would remain within the plant site property.

Project Engineer for the evaluation of water shortage problems of Lake Brooklyn and related lakes in the Etonia Creek basin in Clay County. The project was performed for the SJRWMD and local lake owners at Keystone Heights. The evaluation recommended several alternatives to improve flow of water to Lake Brooklyn. In a follow-up project for the City of Keystone Heights, he helped to develop additional alternatives to move additional water sources to the lakes in the Etonia Creek basin

Expert Witness on the areas of hydrogeology and water resources engineering on behalf of DeSoto and Hardee Counties. This project involved review and evaluation of the technical basis for the water use regulation for SWFWMD's Southern Water Use Caution Area. This project required the review of more than 30 technical reports upon which the water resource evaluation was based.

Preliminary Evaluation of Water Supply from Flatford Swamp in Manatee County, Mosaic and SWFWMD. Project Hydrologist for determination of water quantity and quality from excess water flows in Flatford Swamp. The project purpose is to relieve the excess hydration in the swamp drainage area and downstream. The project would move water to Mosaic's Wingate and Four Corners Mines. The project is still in the planning stage.

Water Use Permitting Evaluation of Crystal Springs in Pasco County, Three Rivers Ranch and Zephyr Hills Water Company: Project Manager for this project where the company planned to increase withdrawals from Crystal Springs to produce bottled water. The study evaluated the relationship of water levels in the springs and surrounding groundwater system and the effects of reduced spring discharge into the Hillsborough River. The alternatives evaluation was presented to offset any streamflow impacts.

Investigation of Blue Sink for Augmentation of the Hillsborough River, City of Tampa and SWFWMD: Blue Sink was previously tributary to the Hillsborough River through underground channels that became plugged in the 1980's. The SWFWMD established a new Minimum Flow rule that required the City of Tampa to provide

streamflow replacement for their public supply water withdrawals. The project investigated the possibility of restoring or bypassing the underground connection, but concluded that the approach was not feasible. Mr. Dumeyer was the project manager for the alternatives evaluation, which included pumping from the sinkhole and piping the pumped water to the river or to another sinkhole connected to the river.

Harvest of Stormwater Runoff from FDOT's proposed First Coast Outer Beltway in Clay and Duvall Counties. This study for Clay County Utilities and FDOT proposed the use of horizontal wells to capture stormwater runoff from retention ponds along the highway right-of-way. The water would be piped to augment the Clay County reclaimed water system and to augment Lake Brooklyn. Project included installation of soil borings and monitor wells along with five short-term pumping tests from shallow production wells.