

PO Box 55802 St. Petersburg, FL 33732-5802 727-667-6786

## Douglas L. Crowson, P.G. Professional Geologist

### **EDUCATION**

• B.S. Hydrogeology - University of South Florida - 1983

## **PROFESSIONAL AFFILIATIONS**

Registered Professional Geologist, Florida

### FIELDS OF SPECIALIZATION

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

### **EXPERIENCE SUMMARY**

Mr. Crowson is a registered professional geologist with more than 30 years of experience in hydrology, hydrogeology, and environmental consulting. Mr. Crowson managed projects for counties, municipalities, developers, & industry involving contract development, permit acquisition & compliance, aquifer recharge & recovery, and water resource development. These activities include providing alternative approaches to enhancing water supplies through the use of natural systems, thereby resulting in lower cost and reduced demand on the resource.

- Created the first Agency water quality database.
- Initiated a maintenance & install program for monitoring equipment.
- Reorganized hydrologic database saving over 1,500 man-hours / year.
- Created & produced the Agency monthly water resources status report.
- Created report of production/monitoring facilities at Tampa Bay Water.
- Authored report on production well characteristics for Starkey Wells 13 & 14.
- Created spreadsheet database for first well complaint system.
- Instructor for Florida Water & Pollution Control Operators Assn. short school.
- Instructor at Environmental Technology Center, Brandon, FL.
- Supervised creation of next generation well mitigation database.
- Created and implemented task oriented well investigation contracts.
- Created & implemented first unit price contract for well construction activities.
- Supervised first ever test of emergency procedures for 911 type events.
- Designed first well examination & rehabilitation program for production wells.
- MSHA certified instructor.



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• Managed Aquifer Recharge & Recovery Projects (ARRP).



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### SELECTED PROJECT EXPERIENCE

Mr. Crowson served as the project manager for the permitting of several large residential developments; including borrow pit and water use permitting. These projects involved assessing groundwater withdrawal impacts and surficial aquifer groundwater flow modeling.

He was the project geologist for the permitting and construction of a 20-inch production well at the Hines Energy Complex in Bartow, FL. This well is used to augment the cooling pond reservoir. Mr. Crowson managed all permitting and compliance issues.

He was also the project hydrogeologist for the emergency backup supply well at the St. Joseph's Hospital North in Lutz, FL. The production well will be utilized during times of emergency when potable water sources become interrupted.

Mr. Crowson was the project manager for the preparation of several large agricultural and industrial water use permits in the Southwest Florida Water Management District. These projects included extensive water modeling with the AGMOD irrigation demand model. These projects also required the development and use of the DWRM2 groundwater flow model with multiple aquifer layers and pumping demands.

He was the project manager for a large residential development that included an extensive sinkhole investigation. An extensive GPR survey was conducted on-site to locate any potential subsurface structural anomalies. A total of nineteen locations were selected for GPR transects with an average transect length being approximately 570 feet long, for a total of 10,900 linear feet.

He was also the project manager for the design and construction of a pilot project for the recharge of surface waters into the surficial aquifer. Two recharge wells were constructed adjacent to the Peace Creek drainage Canal in Polk County, which would induce surficial water from the canal to be filtered by the surficial sands at various depths. The project was designed to show that the area could be used as a large flood detection area.

Mr. Crowson was the project manager of the well installation at Heritage Pines. Nineteen production wells were constructed in various locations within the community to be used for large scale irrigation. GPR and MASW, also known as seismic refraction, was also conducted as part of this project to verify as stable well drilling environment.

He was the project manager for the revision of the groundwater monitoring plans and corrective action plans for several landfill projects that included the water quality testing



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and groundwater elevation monitoring to determine the extent and directional flow of the leachate plume. As a result of the monitoring, several venting wells were constructed to release methane gas.