



## Robert J. Butler

### Hydrologist



#### Areas of Expertise

Hydrology • Aeolian, Fluvial, and Coastal Geomorphology • Hydrogeology • Water Quality Sampling • Well Construction-Related Oversight • Aquifer and Well Testing • Geophysical Borehole Logging • Flood Hazard Area Mapping

#### Education

M.S. Geography  
- The University of Alabama (2019)  
B.S. Environmental Geosciences  
- Valdosta State University (2014)

### Project Experience

#### **OVERVIEW**

Mr. Robert Butler holds a Master of Science Degree in Geography from the University of Alabama, with a concentration in Geomorphology, along with a Certificate in Geographic Information Systems. Additionally, he holds a Bachelor of Science Degree in Environmental Geosciences, with a concentration in Geology, and a double minor in Geography and Astronomy from Valdosta State University. Mr. Butler's academic experiences have exposed him to a variety of fields including hydrology, hydrogeology, sedimentology and stratigraphy, mineralogy, petrography, soil sciences, climatology, and aeolian, fluvial, and coastal geomorphology.

Mr. Butler has a diverse technical skill set that includes proficiency in ArcGIS, statistical software and analysis, remote sensing image interpretation and manipulation, scientific data collection, map creation and interpretation, and technical writing. His experience includes water quality sampling, aquifer performance testing, well construction-related oversight, specific capacity testing, geophysical borehole logging, national flood hazard area mapping, environmental compliance and enforcement, environmental mitigation, data organization and manipulation, and water use permit support. Mr. Butler's extensive knowledge and research experience has allowed him to present his findings at multiple national scientific events.

#### **Hydrologic Field Experience**

Some of Mr. Butler's water quality experience with PWR comes from assisting with monitoring multiple sites at the

Carlton Reserve Wellfield for the Sarasota County Government and multiple sites in the Schroeder-Manatee Ranch area. As an Environmental Specialist Intern for Sarasota County, he gained an in-depth knowledge about Florida wetlands, their plant species, and nutrient overloads that can occur. Additionally, during his education, he has taken numerous riverine profile measurements and has completed multiple soil analyses. His eagerness to engage in all types of field work, along with his friendly demeanor toward his clients, has propelled Mr. Butler to where he is today as an effective consultant and scientist.

#### **Geographic Information Systems**

Mr. Butler achieved a certificate in geographic information systems during his time at the University of Alabama. His extensive GIS experience over the years has helped produce professional quality maps for many different clients including local individuals, city and county governments, and even the Federal Emergency Management Agency. For example, in his previous work experience as a GIS Specialist, Mr. Butler helped create national flood hazard area maps for coastal floodplain communities within the southeastern United States. Additionally, as a Research Assistant, Mr. Butler helped determine racial population distribution within changing voting districts between 2012 - 2017 for the Atlanta court system. Mr. Butler also engaged in a variety of other projects that stem from a range of topics including: commercial and residential development, water use permit support, projected climatic impacts on coastal shorelines and communities, tornadic storm patterns and cost/damage

analysis, wetland invasive plant species mapping, watershed analysis, topographic and geologic research.

**Pulte Homes – Beachwalk Development - Aquifer and Well Testing – Sarasota County, Florida**

Mr. Butler provided specialized hydrogeological interpretation for a new residential development project in Englewood, Florida. In-field activities included well construction-related oversight, specific capacity tests, aquifer performance test, and geologic sampling. Post-fieldwork, Mr. Butler provided geographical maps, detailed geophysical borehole logs, and statistical analysis for data interpretation, presentation, and the final report.

**Lake Okeechobee Watershed Restoration Project (LOWRP) Aquifer Storage and Recovery (ASR) Wells - Specialized Hydrogeologic Services (Continuous Coring)**

Stantec Consulting Services, Inc. (Stantec) is currently engaged with the South Florida Water Management District (SFWMD) to provide consulting services for the “Lake Okeechobee Watershed Restoration Project” (LOWRP). Stantec has contracted with PWR to provide technical oversight services during formation well construction, continuous wireline coring and packer testing of one (1) proposed Aquifer Storage Recovery (ASR) monitor well as part of the LOWRP referred to by the SFWMD as “C38S” (Site). PWR has been assisting Stantec by observing and documenting the geologic and hydrogeologic data in the form of continuous cores samples, monitoring and collecting water quality samples for laboratory analysis, overseeing and documenting geologic and hydrogeologic-related activities at the site, and providing observation of conversion of the completed core hole into a dual-zone monitor well. Mr. Butler currently serves as one of PWR’s on-site field geologists describing core, performing packer tests, collecting water quality samples and coordinating between well contractors and Stantec/PWR project managers.