

GEO-SPATIAL SOLUTIONS FOR WATER RESOURCES AND ENVIRONMENTAL APPLICATIONS

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Abstract. Southern GIS functions as a vital part of the Southern Company, in particular Alabama Power Company. Southern GIS acts as a central data repository and service provider for the Southern Company as it relates to Geographic Information Systems. A large majority of the GIS work directly relates to water resources across the Southeast. As a larger utility company, a portion of our power is generated by hydroelectric plants in Georgia and Alabama. With increased environmental regulations and an ever-present "citizens awareness," Southern Company has a vested interest in the proper use of the hydrography in the Southeast. The use of GIS as an analytical tool helps especially when trying to manage large land-holdings which house many different land features.

Southern GIS is trying to educate and create a sense of awareness to the benefits GIS can offer in the environmental and water resource fields. One of our hallmarks within the state of Alabama has been our joint cooperations and efforts with universities across the state. Our organization is heavily geared toward using student interns and co-ops from various backgrounds. Larger long term projects are being performed at state and local universities as they relate to our digital hydrography, geologic, zoning, and fisheries layer. As we push the envelope with this technology we continually draw from the large resource pool of students from colleges and universities around the Southeast. It is our responsibility as a service provider to create relationships with these universities in an effort to facilitate better ways to educate the students and to learn from the institutions the theories and practices being taught in today's classes.

The demonstration booth will consist of primarily water resource projects and environmental concerns. These practical projects made possible through the use of GIS will help illustrate to others the power of such a tool in today's ever-changing society.