

GIS in Water Resource Management

Effective water resource management requires an in-depth understanding of location, timing and amount of water used. Geographic Information System (GIS) technology can provide an ideal platform in which to analyze and display this type of information.

Currently, the Alabama Office of Water Resources (OWR) supports several GIS initiatives within OWR and between other governmental agencies. Presently, OWR utilizes the latest GIS technology including ArcGIS Desktop 9.2 and ArcServer 9.2 to support web services and other GIS initiatives. The following is a partial list of GIS activities:

- Supporting a wide range of geospatial efforts at the Office of Water Resources through the Water Use Reporting Program, drought planning, the Aerial Imagery Program, National Flood Insurance Program, and the Map Modernization Program.
- Developing GIS maps and web services of ADECA's Economic Development initiatives throughout the State for:
 - The Alabama Development Office
 - Economic Development Partnership of Alabama
 - East Alabama initiatives
 - ADECA's Community Development Block Grant Program
- Creating a statewide GIS map of the Enterprise Zones for the Governor's Resources for Economic Assistance Program for Alabama's Renewal Communities.
- Creating a series of GIS datasets and maps that demonstrate water use data for 2005 Water Use Summary Report.
- Processing aerial imagery of the State of Alabama for
 - Alabama's Coastline
 - CIR for agricultural researchers
 - Storm damage for AEMA
 - Economic Development
- Developing GIS maps and datasets for the Office of Water Resources by researching drought indicators and compiling drought data.
- Developing maps of the water systems for each county in the state in order to add to the OWR geodatabase.

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