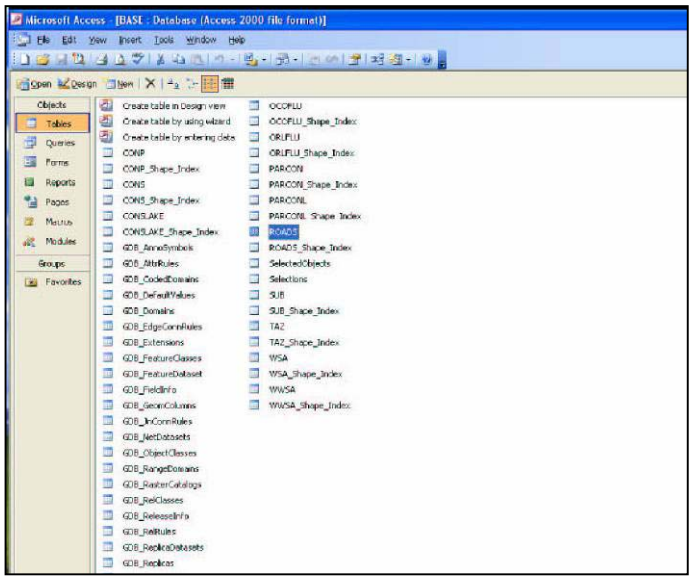
GPI

Integrated Water Resources: Water Use Projections and GIS Assistance

Geodatabase Development



Client/Owner: Orange County
Project Location: Orange County, Florida

GPI provided GIS and water resource engineering services as a sub-consultant to PB Americas, Inc. on behalf of Orange County Utilities for activities required for determination of water use projections using parcel data, water service areas, existing and proposed land use, and multiple other spatially-referenced datasets. The services included the creation, quality control, and cross-validation of geodatabases with multiple feature classes, the preparation of several tabular databases, and the address matching of a large number (all customers with over 3000 GPD consumption) of customer billing accounts. The specific steps necessary for this project included: data inventory and initial creation of PARCEL and a BASE geodatabases; cleansing, modification, and topology check of multiple spatial layers (parcels, water service areas, land use, roads, hydrology, subdivisions, among others); creation of a generalized land use look-up table and quality check); Metropolitan Planning Organization (MPO) data validation and cross-checking; future land use cross-validation and look-up table creation; developable acreage calculations (using wetland and lake coverage and parcel information); and customer billing address matching using multiple created layers.