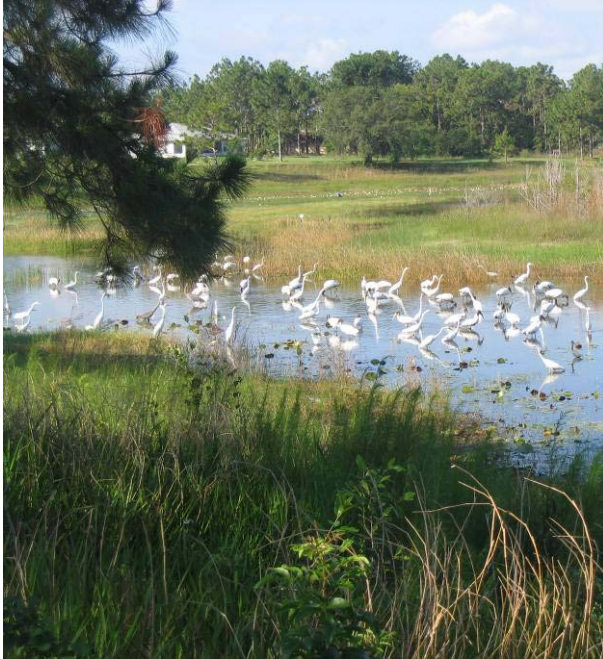

Water Supply Planning and Ecological Monitoring & Reporting

GPI



Water Use Permit Compliance Services

Client/Owner: Hernando County Utilities Department
Project Location: Hernando and Pasco Counties, Florida

GPI has provided water supply planning and related ecological monitoring and reporting services for Hernando County's wellfield facilities since 1995. Through the years, the County's increasing population has resulted in increased groundwater production demands. GPI has assisted the County in applying for and obtaining its water use permits to meet these demands. As part of the permitting process, GPI has inventoried much of the County's ecological resources, including more than 50,000 acres of coastal and inland wetlands in the western portion of the County. Impact assessments of these resources were prepared to evaluate the potential effects from predicted aquifer drawdown. Aerial photo-interpretive assessments were conducted utilizing various historical and recent black-and-white, color-infrared, and true-color imagery. Spatial analyses using GIS were performed to determine the number, type, and acreage of affected wetlands and surface waters. Literature studies of rare wildlife (including rare cave crayfish and protected wading birds) were performed and existing hydrologic, rainfall, and vegetative datasets were compiled and reviewed. From these evaluations, Ecological Impact Assessments were presented and Environmental Management Plans were designed and implemented. Currently, GPI monitors hydrologic and ecologic conditions at 18 wetlands and surface waters across the County. Data collected from hydrologic and ecologic monitoring events are summarized, statistically analyzed, and assessed to determine whether impacts have occurred as a result of groundwater production. Results are presented in annual monitoring reports in satisfaction of permitting requirements.