LAKE OKEECHOBEE AQUAFIER STORAGE & RECOVERY PILOT STUDY – BASELINE CONDITIONS INVESTIGATION

Client Name: *South Florida Water Management District / Tetra Tech (Prime)*
Type of Service: *Biological & Ecological Monitoring & Assessment*

Aquifer storage and recovery (ASR) involves the construction of underground storage wells, often used as companions to reservoirs or other surface water bodies, to provide additional surface water storage capability. Water is stored in a suitable aquifer during times when water is available and recovered from the well during times when it is needed. The Comprehensive Everglades Restoration Project (CERP) proposes to use ASR at an unprecedented scale to temporarily store up to 1.6 billion gallons of treated freshwater per day in the underlying brackish Floridan aquifer system. The storage from regional ASR implementation is expected to help reduce the degree and frequency of damaging high and low water stages on Lake Okeechobee and high and low water flow events in downstream estuaries and wetlands. Three ASR pilot projects, located near Lake Okeechobee, will identify the most suitable sites for ASR wells in the vicinities of these surface water bodies and the optimum configurations of those wells.

Milian, Swain & Associates, Inc. (MSA) is participating in a three-year ecological baseline study to characterize the existing conditions at these three proposed ASR pilot locations. The macroinvertebrate samples are collected quarterly. Taxonomic analysis is performed on each sample to produce species diversity and abundance data for these three locations. The data will be used to compare the macroinvertebrate taxonomic structure before and after the installation and operation of the ASR well pilot facilities.