



**Case Study Category:** SUE

**Case Study Title:** Subsurface Imaging and Mapping with Time Domain Electromagnetics and Pipe and Cable Locators in Miami Florida

**Utility Name:** Miami, FL

**Case Study Abstract:** SUE is an engineering process used to identify and map underground utilities and structures as well as assign a quality level to data. There are different geophysical techniques available to acquire data regarding the two-dimensional location of underground utilities. It is important for designers or engineers to be familiar with various geophysical methods for successful designations of underground utilities. GPR and EM technologies are two predominant technologies that are used in designating and locating the underground utilities. This case study investigated the subsurface imaging and mapping with combining the TDEM and the pipe and cable locators to gather more detailed data. For this case, these technologies were used simultaneously to collect accurate data in an effective manner. There were many water lines detected with the use of pipe and cable locating technologies. These locations were then verified with the TDEM survey.

**Case Study Link:** <http://waterid.org/content/subsurface-imaging-and-mapping-time-domain-electromagnetics-and-pipe-and-cable-locators-miam>