



**Case Study Category:** SUE

**Case Study Title:** Subsurface Imaging and Mapping with Ground Penetrating Radar and Time Domain Electromagnetic Methods in Buckeye Arizona

**Utility Name:** Buckeye, Arizona

**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 ground penetrating radar (GPR) the time domain electromagnetic induction (TDEM) method to gather more detailed data.

**Case Study Link:** <http://waterid.org/content/subsurface-imaging-and-mapping-ground-penetrating-radar-and-time-domain-electromagnetic-meth>