

**Surface water quality assessments**

Provide assistance to the states in support of surface water investigations include field investigations to surface water flows, sample water quality and install recording water flow and quality sondes. Data collected from these field surveys are combined with other available data is then used for determining the presence and the degree of offsite mining impacts, pollutant load assessments, and to support planning for remediation. Tasks performed include, surface water flow modeling, sedimentation analysis, geochemical modeling and contaminant transport modeling with the goal of determining the degree of onsite and off-site impacts related to coal mining. GIS/remote sensing is often a component of these investigations.