

# U.S. Bureau of Reclamation Hydrographic Data Collection/ Hydraulic Engineering/Earth Science Services IDIQ



*Single beam 5 degree GPS integrated sonar for reliable measurements in turbid waters*

RiverRestoration Org LLC was sub-contractor to the US Bureau of Reclamation in hydrographic survey of a 40 mile section of the Rio Grande River from near San Acacia to Truth or Consequences, New Mexico. The effort encompassed 175 cross section including survey of the active channel in addition to topographic survey between pre-established cross section end points. Hydrographic survey for Reclamation includes detailed field notes, photographs, and post-processed survey data that is then compiled in a comprehensive report, comparing our collected data with previous survey of the same reach. RiverRestoration was able to provide significantly tighter and more accurate data more efficiently to Reclamation than other survey methods could produce.



*RiverRestoration - Survey Crews on Middle Rio Grande Near San Marcial*



*RiverRestoration Survey Crews on Elephant Butte Range Lines*



RiverRestoration performs detailed hydrographic survey in-house for all our river projects. Our hydraulic engineers often perform the surveys which helps translate intimate site knowledge into the designs. RiverRestoration maintains state of the art survey-grade GPS equipment with an integrated single-beam sonar depth sounder, which is accurate to 0.1% of depth. This instrument can measure up to 100 feet deep and can be field calibrated to turbid conditions for reliable data collection. RiverRestoration also performs stream gauging and both suspended and bed sediment collection. RiverRestoration integrates the data into base maps and hydraulic models. All data collected is post processed and quality control checked against field observations and closure techniques to maintain the most accurate data.

*RiverRestoration Survey Crews on Elephant Butte Range Lines*

