

## Environmental Projects

Lithologic  
characterization,  
soil sampling, oversight of  
monitoring well installation,  
groundwater monitoring,  
various sites,  
2001 to present

## Selected Hydrogeologic and Water Rights Investigations

Studies relating to the mineral springs, Manitou Springs, Colorado, consultant's report, 2011  
Buckman Wells 10-13 monitoring program biennial report, prepared in conjunction with  
City of Santa Fe Water Division, 2011

Membrane interface  
probe/photoionization detector  
investigations, various sites,  
2002 and 2005

Revised hydrogeologic framework and groundwater-flow model of the Salt Basin aquifer, 2010

Mescalero Apache Reservation Water-Supply Study, consultant's report, 2010

Groundwater-flow modeling in support of water rights applications, New Mexico American  
Water, 2009-2010

Dig and haul remediation,  
various sites,  
2004, 2008, 2011

Analysis of Potable Water Resources and Conceptual Groundwater Modeling, White Sands  
Missile Range, consultant's report and groundwater-flow model, 2009

Development of Buckman Monitoring Area well and well permit database for  
City of Santa Fe, 2009

Groundwater Availability Model for the West Texas Bolsons (Red Light Draw, Green River  
Valley, and Eagle Flat) Aquifer in Texas, hydrogeologic framework and conceptual  
recharge model, 2008

Analysis of streamflow and climate in the Rio Hondo watershed, Pecos Valley,  
multiple linear regression and surface-water modeling, 2007

Report on Water Treatment System Sustainability, Chino Mines, consultant's report  
and regional groundwater-flow model, 2006

Las Cruces 40-Year Water Supply Plan, consultant's report, 2005

Evaluation of the Relationship Between Stream Baseflow in the Rio Ruidoso, the  
Regional Groundwater System, and Discharge from the Village of Ruidoso WWTP,  
Lincoln County, New Mexico, consultant's report, 2004

Groundwater Availability Model for the Igneous and Salt Basin Bolson Aquifers  
of the Davis Mountains Region of Texas, conceptual recharge model, 2004

Baseline Geochemistry of Manganese, Sulfate, and Total Dissolved Solids in  
Dolores Gulch, Cunningham Hill Mine Reclamation Site, consultant's report,  
2004

Summary of Water-Right and Water-Use History, State Engineer File  
Numbers 2444, 2444-Enlarged, 04134, 04135, T-252 et al., and T-2655  
through T-2660, consultant's report, August 2003

## **Aquifer Pumping Test Experience**

Development pumping, step-drawdown pumping tests, and constant-rate pumping tests, various sites, 2001 to present

## **Academic Publications**

Geologic Controls on Ground-Water Flow in the Mimbres Basin, Southwestern New Mexico, in New Mexico Geological Society 59th Fall Field Conference Guidebook, 2008, Steven T. Finch, Jr., Annie M. McCoy, and Erwin A. Melis

## **Well Drilling On-Site Experience**

Lithologic characterization, oversight of drilling and completion of large-capacity water-supply wells, geophysical log interpretation, oversight of well rehabilitation projects, 2001 to present

Gravity Modeling of the Colorado Mineral Belt, in The Rocky Mountain Region: An Evolving Lithosphere, AGU Geophysical Monograph 154, 2005, Annie M. McCoy, Mousumi Roy, Leandro Trevino, and G. Randy Keller

The Proterozoic Ancestry of the Colorado Mineral Belt: ca. 1.4 Ga Shear Zone System in Central Colorado, in The Rocky Mountain Region: An Evolving Lithosphere, AGU Geophysical Monograph 154, 2005, Annie M. McCoy, Karl E. Karlstrom, Michael L. Williams, and Colin A. Shaw

Gravity Modeling of a Batholith and Low-Velocity Mantle Zone Beneath the Colorado Mineral Belt, EOS Transactions, 2003, Annie M. McCoy, Mousumi Roy, Leandro Trevino, and G. Randy Keller

Gravity Modeling of the Colorado Mineral Belt, GSA Abstracts with Programs, 2001, Annie M. McCoy and Mousumi Roy

Tectonic 'Fingerprint' for Deformational History in the Colorado Mineral Belt: Two Orogenic Intervals Punctuated by ~15 Ma Tectonic Pulses, GSA Abstracts with Programs, 2001, Annie M. McCoy, Colin A. Shaw, Karl E. Karlstrom, and Michael L. Williams

Electron-Microprobe Monazite Dating of ca. 1710-1630 Ma and ca. 1380 Ma Deformation in the Homestake Shear Zone, Colorado: Origin and Early Evolution of a Persistent Intracontinental Tectonic Zone, Geology, 2001, Colin A. Shaw, Karl E. Karlstrom, Michael L. Williams, Michael J. Jercinovic, and Annie M. McCoy

Geometry, Kinematics, and Protracted Deformation Along the Colorado Mineral Belt Mylonite Network, GSA Abstracts with Programs, 2000, Annie M. McCoy, Colin A. Shaw, Michael L. Williams, Michael J. Jercinovic, and Karl E. Karlstrom

Was Mafic Enclave Disaggregation an Active Mechanism in the Formation of the El Capitan Granite?, GSA Abstracts with Programs, 1999, Annie M. McCoy, John B. Reid, Jr., and Sheila J. Seaman

Structure and Emplacement of the Buck Creek Mafic/Ultramafic Complex, NC, GSA Abstracts with Programs, 1999, Annie M. McCoy et al.

Late Pleistocene Deformation of the Owens Valley Interpreted from the Shorelines of Long Valley Lake, EOS Transactions, 1997, John B. Reid, Daniel Murray, Jessica Murray, Annie McCoy, Micah Jessup, and Jacob Foster