

James E. Slattery

EDUCATION: Colorado State University - B. S. Civil Engineering, 1984 Colorado State University - M.S. in Civil Engineering - Ground Water Modeling, 1986

SOCIETIES: American Society of Civil Engineers

REGISTRATION: Registered Professional Engineer in Colorado

EXPERIENCE:

2007-Present Slattery & Hendrix Engineering LLC, Parker, Colorado – Member

(from 2007-2009 the firm operated under the title Slattery Aqua Engineering LLC)

Water Engineer for the Republican River Water Conservation District responsible for evaluating various water supply alternatives to assist the State of Colorado to get into compact compliance with the Republican River Compact Administration. Responsible for the evaluation and transfer of approximately 14,000 ac-ft of consumable water from irrigation to compact compliance. District's engineering representative in the design of a \$21 million pipeline system to collect and deliver well field water to the North Fork of the Republican River. Provided expert testimony for the State of Colorado in two Arbitration hearings regarding compact compliance issues on the Republican River.

Represent a range of clients throughout Colorado in water resource matters including the Upper Gunnison River Water Conservancy District, the City of Westminster, the State of Colorado, the Rio Grande Water Users Association, the State of Colorado, the Denver Water Department, the Evergreen Metropolitan District, and the Republican River Water Conservancy District. Worked on variety of water rights transfer cases involving, expert witness court testimony, development of surface water and groundwater models, evaluation of replacement supplies, and the evaluation of historical consumptive use.

Developed accounting spreadsheets to document the use of water rights and return flow obligations for the City of Woodland Park, the City of Manitou Springs, the City of Westminster, and the Evergreen Metropolitan District. Prepared expert reports for Denver Water concerning water right diligence applications in the Williams Fork basin and in the Blue River Basin. Worked on behalf of the Rio Grande Water Users Association to determine and develop necessary water supplies to replace well depletions. Since 2003, participated in a peer review committee to update and refine the MODFLOW groundwater model developed as part of the Rio Grande Decision Support System. Testified as an Expert Witness in two separate court cases regarding the use and application of the groundwater model to estimate stream depletions from confined and unconfined aquifer pumping in the San Luis Valley.

1995-2006 Helton & Williamsen, P.C., Englewood, Colorado

Vice President – Responsible for projects involving water supply, water requirements, water rights, reservoir operation, and basin-wide planning. Experienced in the analysis of databases and in developing computer models to solve water resource problems.

Performed consumptive use studies to determine water use patterns for both surface and ground water supplies. Representative assignments include the development of a spreadsheet model of the Bear Creek basin, engineering analyses and expert testimony in the second phase of <u>Kansas v. Colorado</u> in the U.S. Supreme Court, development of a daily basin planning model for the Clear Creek basin, and development of a monthly spreadsheet model of the Upper Gunnison basin. Testified as an expert witness in Case No. 2004CW24 concerning rules and regulations for new wells in the confined aquifer in the San Luis Valley.

Performed a needs and storage assessment for the Upper Gunnison River Water Conservancy District. Modified and enhanced the HI model of the lower Arkansas River Basin as part of the <u>Kansas v. Colorado</u> U.S. Supreme Court case on the Arkansas River. Appointed to the 3 member team to represent Colorado in the <u>Kansas v. Nebraska v. Colorado</u> U.S. Supreme Court Case concerning litigation in the Republican River basin. Involved in numerous Colorado water court cases concerning the transfer of use water from agricultural to municipal purposes.

Developed or reviewed various MODFLOW groundwater models in Colorado including a groundwater model for the sandstone and granite aquifers in the vicinity of Woodland Park. Member of the peer review committee for the MODFLOW model developed by the Colorado Department of Water Resources for the San Luis Valley. Testified as an expert witness in Case No. 2004CW24 regarding the inflow and outflow components for the MODFLOW groundwater model of the San Luis Valley.

Developed augmentation plans to cover various water uses throughout the state of Colorado including the augmentation plan for the Lower Arkansas Water Management Association to augment well depletions from approximately 700 wells in Case No. 02CW181.

1986-1995 Boyle Engineering Corporation, Lakewood, CO.

(1992-1995) Project Manager. Managed a wide range of water resource and computer modeling projects, including the development of PACSM a comprehensive computer model representing the operation of Denver Water's

water supply system. This model simultaneously represents the operation of Denver Water's facilities in both the South Platte and the Colorado River basins using a daily time step and a 45-year study period. Another model was developed to evaluate the monthly operation of the water supply system for the City of San Diego. Served as technical reviewer for numerous other computer modeling projects and water resource studies including ground water models in North Carolina, Florida, Colorado, and California. Analyzed and reviewed numerous ground water pumping tests throughout the United States for unconfined, confined, and leaky-confined aquifers.

(1986-91) Water Resources Engineer. Responsible or assisted in the development of water supply, water rights, surface water, and ground water studies, and for surface water and ground water modeling projects. Specific tasks included numerous applications of the USGS three-dimensional MODFLOW model to ground water basins throughout the United States. Also, applied a three-dimensional finite element model to evaluate surface water-ground water conditions and interactions in the Central Valley of California. Served as an expert for the State of Colorado in <u>Kansas v. Colorado</u> in the U.S. Supreme Court. Responsible in this case for developing the ground water pumping estimates used to assess the impacts of ground water pumping on historical streamflows.