

James R. Kunkel, Ph.D., P.E.

Education

Ph.D., Hydrology and Water Resources, The University of Arizona, 1974

M.S., Civil Engineering, The University of Connecticut, 1969

B.S.C.E., Civil Engineering, St. Martin's University, 1967

Registrations/Certifications/Training/Professional Societies

Licensed Professional Engineer (Civil Engineering):

- Colorado, No. 16922, 1980 - 2015 (Active)
- Wyoming, No. 4942, 1986 -2012 (Inactive)
- New Mexico, No. 11311, 1990 - 2011 (Inactive)
- Washington, No. 30141, 1993 - 2016 (Active)
- Arizona, No. 29610, 1995 - 2013 (Inactive)

Registered Professional Hydrologist, (American Institute of Hydrology), No. 542, 1985-2010 (Retired)

MSHA Miner Training, 40 Hour Training and Annual Refreshers

OSHA Hazardous Waste Operations Training Course, 24 Hours

OSHA Supervisory Health and Safety Training, 8 Hours

First Aid and CPR Training, 8 Hours

First Aid, 4-Hour Refresher

CPR Training, 4-Hour Refresher

Self-Rescuer Training

American Society of Civil Engineers: 1967 – Present (Life Member)

American Water Resources Association: 1969 – 2010 (Retired)

- 26th Annual Conference & Symposia Exhibits Chair (1990)
- Colorado Section Vice President (1995-1996)
- Colorado Section Secretary (1993-1994)
- Colorado Section Treasurer (1988-89, 1991-92, 1997-98, and 2001-02)
- Colorado Section Scholarship Committee (1990 – 2009)
- Colorado Section Legal/Legislative Committee (1990-1995)

American Institute of Hydrology: 1985 – 2010 (Retired)

Experience Record

CONSULTANT IN PRIVATE PRACTICE, 2013 – Present

GIDAHATARI S.A., *Senior Technical Consultant and Seminar Lecturer*, Lima, Peru, 2013 - Present

GRAN COLOMBIA GOLD, LTD., *Environmental Manager*, Medellín, Colombia, 2010 - 2012

KNIGHT PIÉSOLD AND CO., *Senior Project Manager*, 1996 – 2002, *Senior Associate*, 2002 – 2013.

COLORADO SCHOOL OF MINES, *Adjunct Associate Professor*, 1989 - 2006

HYDRO-SEARCH, INC., *Senior Project Director*, 1994 - 1996

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ADVANCED SCIENCES, INC., *Senior Hydrologist/Project Manager, 1989 – 1992, Senior Principal Engineer, 1992-1994*

IN-SITU, INC., *Senior Hydrologist, 1983 - 1989*

WOODWARD-CLYDE CONSULTANTS, INC., *Assistant Chief, Water Resources Division, 1976 - 1983*

WILLIAM MATOTAN AND ASSOCIATES, INC., *Project Manager, 1974 -1976*

**MEXICAN AGRICULTURE AND WATER RESOURCES MINISTRY (SARH),
PAPALOAPAN RIVER BASIN COMMISSION,** *Hydrologic Consultant, Mexico, D.F., 1972 - 1974*

PIMA COUNTY HIGHWAY DEPARTMENT, *Civil Engineer, 1969 - 1972*

Selected Relevant Projects

- Hydrologic and Hydraulic Design of Ash Pond Disposal Facilities for a Coal-Fired Power Plant near Kansas City, MO.
- Hydrologic and Hydraulic Design of Ash Pond Disposal Facilities for a Coal-Fired Power Plant near Lawrence, KS.
- Hydrologic and Hydraulic Design of Ash Landfill Disposal Facilities for the R.D. Nixon Coal-Fired Power Plant near Colorado Springs, CO.
- Water-Balance Calculations for an Ash Landfill Disposal Facility for a Coal Gasification Plant near Gillette, WY.
- Research Related to Disposal of Sodium Injection Ash into Coal-Fired Power Plant Stack Emissions, throughout the United States.
- Environmental Baseline and Impact Study, including Mine Dewatering, for a Coal Mine in Converse County, WY.
- Mine Permit for the Mt. Gunnison Coal Project near Somerset, CO.
- Mine Permit for the Jim Bridger Mine Mouth Power Plant Coal Mine near Point of Rocks, WY.
- Hydrologic Design for a Sediment Control Dam for the Spring Creek Coal Mine near Decker, MT.
- Lawsuit Related to Methane Gas Venting near Gillette, WY.
- Preliminary Sizing of Two Sedimentation Basins and Diversion Channels at the Golden Eagle Coal Mine near Weston, CO.

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- Research on Coal-bed Methane Dewatering for the Gas Research Institute, throughout the United States.
- Mine Permit for the Spring Creek Coal Mine near Decker MT.
- Evacuation Plan for Failure of Grayrocks Dam, Cooling Water Supply for a Coal-Fired Power Plant near Wheatland, WY.
- Due Diligence Hydrologic and Hydraulic Studies for Purchase of El Cerrejón Coal Mine near Barranquilla, Colombia.
- Water Supply and Reservoir Analysis Studies, Raton Basin Coal Project, CO.
- Daily Streamflow Generation and Statistical Analyses for a Coal Mine EIA, Yampa River, CO.
- Riprap Revetment Design, Empire Coal Mine near Craig, CO.
- **Over 20 Cover and Unsaturated Flow Modeling Projects, Worldwide.** Models utilized in these projects have included: USEPA HELP, UNSAT-H, VADOSEW, SoilCover, HYDRUS-1D, HYDRUS-2D, Princeton 1-D Unsaturated Code, SEEP/W, UNSAT2, VS2D/VS2DT, SESOIL, VADSAT, SoilProp, VLEACH, and others.

Testimony

Plan for Augmentation for Fairmount Cemetery, Denver, Colorado. Testimony in Division 1 Water Court, Greeley, CO.

Case Number HO-09572. Securities and Exchange Commission, Washington, D.C., In the Matter of Southwestern Water Exploration, Inc. Deposition (December 2003) related to ground-water engineering work on the Hygiene Sandstone, Larimer and Weld counties, Colorado.

Case Number 01 CV 58. Chaffee County District Court, Salida, Colorado, Mt. Princeton Hot Springs LLC v. Martin/Martin. Deposition and trial testimony (April 2004) related to alleged errors and omissions in the failure of a wastewater treatment plant due to high ground water table.

Case Number 04 CV 1082. Boulder County District Court, Boulder, Colorado, Superior Metropolitan District v. McLaughlin Water Engineers, Ltd. Deposition (May 2006) related to alleged errors and omissions for a water treatment plant overflow.

Case Number 06 CIV 5465. Denver Regional Office, Securities and Exchange Commission, Denver, Co., SEC v. Steven B. Misner. Deposition (June 2007) related to bankruptcy of Southwestern Water Exploration, Inc.

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Testimony before Colorado State Engineer related to statistical analysis of streamflow data in the lower Purgatoire River Basin, Colorado related to "futile calls" by downstream senior water rights. During the data analyses and hearing process, rules of evidence were used and both the client and plaintiff were represented by legal counsel.

Testimony before a special EPA Region VIII hearing officer regarding reservoir temperature and water-quality modeling for Lake Catamount near Steamboat Springs, Colorado.

Case No. 14AB-CC00155. Franklin County Circuit Court, Division III, State of Missouri ex rel. Campbell v. Bd. of Zoning Adjustment of Franklin County. Testimony (May 2014) before the Franklin County Board of Zoning Adjustment on the county ordinance for a 2-foot separation between the water table and the bottom of a proposed Ameren coal ash disposal landfill liner for their Labadie power plant. Record of the testimony is part of the law suit.