CONFERENCE SPEAKERS



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NM Energy, Minerals & Natural Resources
Department



Herman Bouwer USDA Water Conservation



David Boyer NM Oil Conservation Division



Garrey Carruthers
Governor of New Mexico



Peter V. Domenici, Jr. Civerolo, Hansen & Wolf, PA



Doug Earp
Albuquerque Environmental Dept.



Bruce P. Gallaher NM Environmental Improvement Division



Bruce Glenn
US Bureau of Reclamation



Maxine S. Goad NM Environmental Improvement Division



Ken Kirkpatrick
Environmental Protection
Agency



Dan Knorr Parkhill, Smith & Cooper



Dennis McQuillan NM Environmental Improvement Division



Susan Christopher Nunn University of New Mexico



William Otto
City of Albuquerque



Richard Perkins NM Environmental Improvement Division



Fred M. Phillips New Mexico Institute of Mining and Technology



Dan Shein Arizona House of Representatives



Jay F. Stein Civerolo, Hansen & Wolf, PA



Jane G. Wells Bureau of Indian Affairs

MODERATORS



Bobby J. Creel Water Resources Research Institute



Charles DuMars
University of New Mexico



John Hernandez New Mexico State University



William Webster Leedshill-Herkenhoff Engineering

SPEAKERS PREVIEW

TOM BAHR is the secretary of the Energy, Minerals and Natural Resources Department. His current interests focus on recent water court cases and their implications to water and natural resource policy and management in the western United States. Prior to his cabinet appointment, he was director of the New Mexico Water Resources Research Institute. He previously served as director of the Interior Department's Office of Water Policy under the first Reagan administration. He is a native of Wisconsin and received his undergraduate degree from the University of Idaho and a master's and doctorate from Michigan State University.

HERMAN BOUWER is the director of the U.S. Department of Agriculture's Water Conservation Laboratory in Phoenix. He is leader of a subsurface water management research group, whose main projects deal with renovation of sewage effluent by ground water recharge and effects of irrigated agriculture on ground water. He has written about 180 research publications, the textbook <u>Groundwater Hydrology</u>, and 10 book chapters. In 1985, he received the Scientist of the Year Award from the USDA. He received B.S. and M.S. degrees in land drainage and irrigation from the National Agricultural University of Wageningen, The Netherlands, and a Ph.D. in hydrology and water management from Cornell University.

DAVID G. BOYER is the environmental bureau chief for the New Mexico Oil Conservation Division where he is responsible for the permitting of gas plants and refineries, the regulation of surface disposal of oil production wastes, and the investigation of oil-related ground water contamination. Previously he was with the New Mexico Environmental Improvement Division where he was in charge of the EPA's Surface Impoundment Assessment and Underground Injection Control Program. He received his B.S. and M.S. degrees in hydrology from the University of Arizona and has conducted hydrogeological investigations for the Arizona Water Resources Research Center and the Office of Arid Lands Studies.

GARREY CARRUTHERS, the 24th governor of New Mexico, began his political career in 1959 as state president of the Future Farmers of America. In 1974, he became a White House Fellow under President Gerald Ford and in 1981 he was appointed assistant secretary of the Interior Department. After earning bachelor's and master's degrees at New Mexico State University and a doctorate in economics from Iowa State University, he returned to NMSU to teach agricultural economics and agricultural business. His association with the university continued until 1985 when he resigned to run for governor. From 1976 to 1978, he was the acting director of the New Mexico Water Resources Research Institute. He grew up on a farm in Aztec, New Mexico.

PETER V. DOMENICI, JR. is an attorney with the law firm Civerolo, Hansen & Wolf, P.A. specializing in water and related resources, water pollution, and water allocation and distribution. He has been counsel in complex water resource and pollution litigation, including <u>Pueblo of Acoma and Pueblo of Laguna v. City of Grants, et al</u>. He is co-author of "Indian Water Rights Expanded," published in the August 1987 issue of the New Mexico Business Journal. He holds a bachelor's degree from the University of Virginia and a J.D. from the University of New Mexico School of Law.

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DOUGLAS EARP is a geohydrologist with the City of Albuquerque Environmental Health Department where his main responsibilities include development of a ground water quality monitoring program, periodic monitoring of existing wells, design and construction of additional monitoring wells, computer modeling, and data base development and management. For five years he worked in the surface water and ground water programs of the New Mexico Environmental Improvement Division. He holds a bachelor's degree in biology from the University of New Mexico and a master's degree in hydrology from the University of Arizona.

BRUCE GALLAHER is a program manager with the Ground Water Bureau of the New Mexico Environmental Improvement Division where his responsibilities include conducting field investigations of landfills, identifying hazardous waste programs in the state, and developing New Mexico's ground water protection strategy. He has a bachelor's degree in mathematics from Eastern New Mexico University and a master's degree in hydrology from the University of Arizona. He was born and raised in New Mexico.

BRUCE GLENN is a general engineer with the U.S. Bureau of Reclamation Engineering and Research Center, Denver. His career spans 26 years with the bureau as a planner evaluating and reviewing planning studies. His special assignments include conducting a short course in water resources planning in the Philippines and reviewing the Three-Gorges Project in China. He also has served on various committees implementing national water policy. He is currently the program manager of the High Plains States Groundwater Recharge Demonstration Program. He holds a B.S. in civil engineering from Cornell University, an M.S. in engineering economics from Stanford University and an M.S. in policy analysis, also from Stanford University.

MAXINE S. GOAD is a water resources specialist and has been working in water pollution control for the State of New Mexico Environmental Improvement Division since 1974. She was principal draftsperson and one of the principal developers of the New Mexico Water Quality Control Commission regulations to protect ground water quality. As program manager for the Ground Water Section she was responsible for the implementation of these regulations from their adoption in 1977 until 1985. Ms. Goad's present duties include working on coordination of ground water regulatory programs and being a major participant in the development of the New Mexico Ground Water Quality Protection Strategy being prepared as required by the EPA. She received B.S. and M.S. degrees in physics from Stanford University in California.

KEN KIRKPATRICK is the deputy director, Water Management Division, Office of Ground Water, U.S. Environmental Protection Agency, Region 6, Dallas. His 26 years with the federal government include more than a dozen positions concerned with managing air and water quality. Recently he served a two-year intergovernmental assignment from the EPA as deputy director for the Arkansas Department of Pollution Control and Ecology. He is a registered professional engineer and a member of the Texas Society of Professional Engineers and the Water Pollution Control Federation. The Kansas native holds a B.S. in civil engineering from Colorado State University and an M.S. in civil engineering from Oregon State University.

DANIEL B. KNORR is vice president of Parkhill, Smith & Cooper, Inc., El Paso, Texas. Since joining the firm in 1971, he has had a major role in the planning and design of several major projects for El Paso's Public Service Board, including El Paso's \$30 million Northeast Treatment Plant. In conjunction with this project, he designed a sewage drinking water treatment plant required for a full scale aquifer recharge project in El

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Paso. His involvement in this project has brought him national recognition as one of the foremost designers of advanced wastewater treatment facilities in the United States. He grew up in Artesia, New Mexico and graduated from New Mexico State University with a B.S. in civil engineering.

DENNIS MCQUILLAN is a water resources specialist with the Ground Water Bureau of the New Mexico Environmental Improvement Division. He conducts regional and local investigations of ground water quality and contaminant discharges, provides technical assistance to other agencies, local governments and citizens, oversees several cleanup efforts, and maintains an inventory of ground water contamination in the state. He received a B.S. in geology from the University of New Mexico and has more than eight years of ground water quality experience.

SUSAN CHRISTOPHER NUNN recently joined the faculty of the Department of Economics at the University of New Mexico where she teaches water policy, water quality management and natural resources economics. She was previously with the Department of Hydrology and Water Resources at the University of Arizona. She currently works in the area of rural/urban water transfer policy and serves on several state and local committees in Arizona. She was co-organizer of a conference on "Water Transfers and the Quality of Rural Life" in April 1987. She received her Ph.D. from the University of Wisconsin-Madison.

WILLIAM H. OTTO is assistant director of the Public Works Department, city of Albuquerque, where he is responsible for planning the city's transportation, drainage, wastewater and water supply systems. His career spans 25 years devoted to planning, design, construction, operation and maintenance of public works. He spent 15 of those years specializing in the field of water works, primarily involving Albuquerque's water supply system. He holds a B.S. in civil engineering from the University of New Mexico.

RICHARD PERKINS is a water resources specialist with the New Mexico Environmental Improvement Division where he is currently developing the New Mexico Ground Water Quality Protection Strategy. Previously at the EID he managed the state's liquid waste program and ground water quality surveillance program. Before coming to New Mexico, he was an assistant professor of biology at the University of Kansas. He holds a B.S. in biology from the University of California, an M.S. in zoology from the University of Georgia and a Ph.D. in ecology, also from that university.

FRED M. PHILLIPS is an associate professor of hydrology at the New Mexico Institute of Mining and Technology where his research interests include ground water dating, paleoclimatic reconstruction from ground water geochemistry, and paleohydrology of quaternary "pluvial" lakes. His research has been published in several journals, proceedings and technical reports. He is the co-author of the <u>Handbook of Environmental Isotope Geochemistry</u>. He is a native Californian and a graduate of the University of California at Santa Cruz. He also holds an M.S. and a Ph.D. in hydrology from the University of Arizona.

DAN SHEIN is a research analyst with the Arizona House of Representatives where he is on the staff of the Natural Resources and Energy Committee and the Agriculture Committee. His responsibilities on the Natural Resources Committee include preparing issue papers and analysis of legislation relating to those areas under the committee's responsibilities. Previously he was a consultant in public policy, research and analysis. He has also worked as a planner with the Energy Division of the Arizona Office of

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Planning and Development. He has a B.A. in political science from Syracuse University and an M.S. in social science from Florida State University. He was born and raised in Connecticut but came to the Sunbelt 11 years ago.

JAY F. STEIN is an attorney with the law firm Civerolo, Hansen & Wolf, P.A., specializing in environmental litigation. He was the lead counsel to the New Mexico Water Quality Control Commission in the case of <u>Pueblo of Acoma and Pueblo of Laguna v. City of Grants, et al.</u> From 1977 to 1985, he was counsel to the State Engineer Office and the Interstate Stream Commission. During that time he handled interstate litigation and intrastate water adjudications, including <u>Colorado v. New Mexico</u> and the Hondo adjudication involving the claims of the Mescalero Apache tribe. He has a J.D. degree from the University of New Mexico School of Law.

JANE G. WELLS is a hydrologist with the Bureau of Indian Affairs, U.S. Department of the Interior, Albuquerque. She serves as a Principal Professional Technical Consultant in the development and implementation of a nationwide water quality control program for the BIA. She is also responsible at the BIA for providing expert witness testimony for Indian water quantity adjudications, providing the BIA and Indian tribes with information on new EPA water regulatory programs and overseeing ground water exploration contracts. Her responsibilities also include collecting and interpreting other geohydrologic data for court work or Indian water management purposes. She graduated with honors from the University of New Mexico in 1977 and is a Certified Professional Geological Scientist.

MODERATORS

BOBBY J. CREEL is the acting director of the New Mexico Water Resources Research Institute. Dr. Creel's extensive experience in resource economics includes more than 25 research projects. He also holds the position as college associate professor in the Agricultural Economics and Agricultural Business Department at New Mexico State University. Dr. Creel holds bachelor's and master's degrees from New Mexico State University and a doctorate from the University of New Mexico in resource economics. He is a native New Mexican who grew up on a ranch near Ruidoso, New Mexico.

CHARLES T. DUMARS, professor of law at the University of New Mexico, recently served as chairman of the New Mexico Water Law Study Committee. He is the author of numerous articles on water law and water rights and is the co-author of Economic Impact of Alternative Resolutions of New Mexico Pueblo Indian Water Rights. He is a member of the Western States Water Council, the Board of Trustees of the Rocky Mountain Mineral Law Institute, and the American Bar Association Natural Resources Committee. He received a bachelor's degree from the University of Oregon and a law degree from the University of Arizona.

JOHN HERNANDEZ has wide ranging administrative and research experience including positions as dean of engineering at New Mexico State University and deputy administrator of the U.S Environmental Protection Agency. During a recent sabbatical he worked in the Technical Division of the New Mexico State Engineer Office on ground water basin studies. He also helped plan a proposed update of New Mexico's water resources assessment. He holds degrees from Harvard University, Purdue University and the University of New Mexico.

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WALTER A. WEBSTER is senior vice-president of Leedshill-Herkenhoff, Inc., which conducts water resources development for municipalities in New Mexico. He has been with the firm since 1954. Before that, he was with the U.S. Army Corps of Engineers, Albuquerque District. He is a member of several professional organizations including the American Water Works Association, the American Society of Civil Engineers, the American Consulting Engineers Council of New Mexico and the American Consulting Engineers Council. He holds a B.S. in civil engineering from the University of New Mexico.

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