



## IN MEMORIAM

David Keith Todd  
Professor of Civil Engineering, Emeritus  
Berkeley  
1923 – 2006

David Keith Todd, worldwide authority on groundwater, was born on December 30, 1923, and grew up in West Lafayette, Indiana, along the Wabash River. During World War II, he enlisted in the Army Air Corps, serving as a weather forecaster, and became a lieutenant. In June 1948, Todd married Caroline “Rolly” Lark, who became his companion and supporter for more than 50 years.

Dr. Todd received his B.S. degree in civil engineering from Purdue University in June 1948, and his M.S. in meteorology from New York University in 1949. He became an instructor in the Division of Civil Engineering and Irrigation at the University of California, Berkeley, in January 1950, and a lecturer from 1951 to 1953 while working toward a Ph.D. His thesis (1953) focused on transient bank storage of a flooding stream. Thus began his illustrious career in groundwater.

He was appointed assistant professor, Department of Civil Engineering, in 1953, and rose rapidly to associate professor and then to professor by 1962, when he served as chair, Division of Hydraulics and Sanitary Engineering, 1970-1975, and was in charge of the graduate program in Water Resources Engineering. He took two sabbatical leaves: in 1957, the second half as a National Science Foundation (NSF) Postdoctoral Fellow, and in 1964-65, as an NSF Senior Postdoctoral Fellow. He also took a leave to serve as Centennial Professor at the American University of Beirut, Lebanon, 1966-67. During the summers of 1969 to 1972, he was a visiting professor at the Universidad de Oriente, Puerto la Cruz, Venezuela.

Dr. Todd was an excellent teacher; his lectures were well organized, thorough, and interesting with real-world input from his extensive consulting. He taught courses in elementary fluid mechanics, hydrology, groundwater hydrology, surface water hydrology, advanced applied hydrology, and water resources development. As a professor, he served as mentor to many of today’s world leaders in the field of groundwater hydrology.

His research interests focused on problems of understanding and managing groundwater resources: seepage, seawater intrusion, groundwater tracers, and artificial recharge. In 1961, Dr. Todd participated in the White House– U.S. Department of Interior study panel investigation of high water table and salinity problems in the Indus Valley of Pakistan, documented in Report on Land and Water Development in the Indus Plain, U.S. Government Printing Office, January 1964.

Dr. Todd’s work appeared in 123 articles, books, papers, reports, and other publications. His book Groundwater Hydrology was published in 1959, the second edition in 1980. It has been used in more than 50 U.S. universities, and translated into Spanish, Portuguese, Turkish, Persian, Hindi, and Malaysian. The third edition, substantially revised and expanded, was published in 2005 with Larry W. Mays as coauthor. Dr. Todd was coauthor of the book Polluted Groundwater, Water Information Center, Inc., Port Washington, New

York, 1976. He was editor of *The Water Encyclopedia* (1st edition, 1970), recognized as an outstanding reference book of 1971 by *Library Journal*, and was coeditor of the second edition (1990).

He retired from the University and became professor emeritus on December 30, 1980.

He founded a groundwater consulting firm, David Keith Todd Consulting Engineers, which has served hundreds of clients, including attorneys, industries, nonprofit organizations, and government agencies ranging from local water districts to the United Nations. He served pro bono on blue ribbon panels, most notably the Scientific Advisory Panel for the Santa Ana River Water Quality and Health Study. He also organized educational seminars, such as *Fundamentals of Groundwater Management* (1981), *Water Reclamation and Reuse — California Experiences* (1982), and *Artificial Recharge of Groundwater* (1985), originally part of an international program sponsored by the United Nations in Ahmedabad, India.

Dr. Todd served as an expert witness on groundwater hydrology in numerous high profile legal cases that helped define water rights and establish the respective responsibilities of government agencies and private companies in addressing groundwater contamination. For example, he served as a key groundwater expert for the U.S. Department of Justice on groundwater contamination at Rocky Mountain Arsenal near Denver; as the hydrology expert for both the State of California and the United States in a lawsuit over administration of the land surrounding Mono Lake; and as one of the groundwater experts for the State of Nebraska in a Supreme Court case in which Kansas sued Nebraska, Colorado, and Wyoming over water rights on the Republican River.

Dr. Todd served as president of Todd Engineers until 2002 and as an active consultant and chairman of the board up to the time of his death.

Throughout his academic and consulting career, he supported the UC Water Resources Center (WRC), which funds research and education about water management in California. Between 1965 and 1970, he received numerous research grants from WRC to analyze groundwater management systems. He served as a member of the WRC Coordinating Board, 1973-1976. Todd presented papers or moderated panel discussions at WRC's Biennial Groundwater Conference in 1959, 1961, 1967, 1969, and 1973, and served as the keynote speaker for the 25th conference in 2005.

In addition to his extensive contributions to the Water Resources Center, he was also a staunch supporter of its library component, the Water Resources Center Archives (WRCA), located on the UC Berkeley campus. He played a significant role in the establishment and growth of WRCA and its collections. In 1975 he donated to WRCA his consulting reports covering his work from 1957 to 1969, ensuring that those documents would be both preserved and made accessible to others. They are available for viewing at WRCA with advance notice; an inventory is available through the Online Archive of California: <http://oac.cdlib.org>. In 2000, Dr. Todd donated additional unique books and reports from his personal library to WRCA. He helped increase the visibility and prominence of the California Colloquium on Water, a lecture series hosted by WRCA, with his 2002 lecture, "Managing Ground Water Resources." He was one of the early financial supporters of WRCA and continued his support until the time of his death.

Dr. Todd was a Registered Civil Engineer in California, a Registered Civil Engineer in Indiana, and a Registered Professional Engineer in Delaware. He was a fellow of the American Society of Civil Engineers, the American Geophysical Union, the American Meteorological Association, and the American Association for the Advancement of Science, and was a member of several other societies. Dr. Todd was a member of Tau Beta Pi, Chi Epsilon, and Sigma Xi. He received the first Distinguished Alumnus of Purdue University Award in 1964; became an Honorary Board Member of the American Institute of Hydrology in 1999; and received the John Hem Excellence in Science and Engineering Award of the National Groundwater Association in 1997, the C. V. Theis Award of the American Institute of Hydrology in 1999, and the Lifetime Achievement Award of the Groundwater Resources Association of California in 1999.

David Keith Todd is survived by his wife, Rolly, who resides in Piedmont, California, and their two sons, Stuart Keith Todd of Medford, Oregon, and Brian Wesley Todd of Los Angeles.

Robert L. Wiegel  
Iris Priestaf  
Linda Vida