“Drought, Uncertainty, and The Future of Water for California”

Dr. Jay Lund, UC Davis

Water has always shaped California's economy, society, and ecosystems. The talk will briefly review this shaping since the end of the last ice age, with dramatic changes in sea level, temperatures and runoff, through historical developments of small and large scale water management to today's water system. The talk will then examine prospects for further changes in management and water availability due to changes in climate, ecosystem management, and economic structure. Some important policy challenges will be identified.

Dr. Jay Lund is a Professor of Civil and Environmental Engineering and a member of the US National Academy of Engineering. Professor Lund's principal research interest is in the application of systems analysis, economic, and management methods to infrastructure and public works problems. Dr. Lund has led development and application of a large-scale optimization modeling for California's water supply, as well as various other modeling studies for the management of flood control and environmental purposes. Professor Lund is the co-author of several books and reports on the Sacramento-San Joaquin Delta. Dr. Lund co-authored an analysis of economical water supply alternatives to Hetch Hetchy Dam. Professor Lund is on the editorial board of several water resources publications, has been a member of the Advisory Committee for the 1998 and 2005 California Water Plan Updates, and has served as Convener of the California Water and Environment Modeling Forum and President of the Universities Council on Water Resources, and the Delta Independent Science Board.