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Session abstract

Title: Water Resources Modeling, Management, and Policy

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Water managers and policy makers must understand how various human activities affect water resources and how variable hydrology affects humans' well-being. Water resources simulation, optimization, conflict resolution, mulch-objective decision making, and system dynamics models provide tools to integrate and study the major physical, socioeconomic, and political aspects of water resources systems. For decades, water resources professionals have developed and used models to address water resources problems. Early efforts focused on representing hydrologic processes. More recent interdisciplinary efforts have led to increasing complexity and integration of environmental, social, and economic system components. Yet water resources models are still evolving in terms of approach, application, and ability to provide managers and policy makers with actionable results in a timely fashion and at reasonable cost. At the end of the day, what changes as a result of the modeling study? This session solicits contributions that use systems analysis methods to inform water resources management, operations, and/or policy making. We welcome case studies that describe how systems analysis work changed system management, operations, or policy. We encourage contributions that show how to increase the policy-relevance of systems analysis work. And we seek contributions that demonstrate how models and the new understandings reached through their use help inform management and policy.