

XXX-Hydrology: Bridging Disciplines to Address Key Environmental Problems

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ABSTRACT

Hydrology, as the science of the full water cycle, is intrinsically transdisciplinary. It is also a science with applied roots. For more than half a century hydrologists have cooperated with scientists from other disciplines and, to some extent, incorporated the approaches and methods of other disciplines into their own work. Geo-hydrology, Eco-hydrology, Bio-hydrology, and the newest, Socio-hydrology, are examples of specializations to have emerged at the intersection of hydrology and other disciplines. By and large, these specializations have focused on real world problems related to water supply, pollution, hazards related to flooding, and others. The process of preparing the Science Plan of the new IAHS Scientific Decade has revealed considerable interest among IAHS members in strengthening cooperation with related disciplines, especially the social sciences, and in focusing on critical development and environmental challenges. The motivation for and benefits of moving in this direction are well articulated, but the mechanisms are not. This presentation will explore potential mechanisms for inter- and cross-disciplinary cooperation in research and education using recent examples from ecohydrology. The objective is to stimulate a discussion of mechanisms to facilitate better cooperation in the new IAHS Scientific Decade.