

Exploiting path dependency to improve projections in socio-hydrological systems

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In trying to understand how societies manage their water resources, researchers are increasingly turning towards the concept of socio-hydrological systems. Socio-hydrological systems are coupled-human water systems where water resource use emerges from the complex interactions between humans and their environment. Socio-hydrological systems tend to exhibit highly non-linear behaviour, making projections of future system state extremely difficult. However, the different sub-components of socio-hydrological systems are actually constrained by the history of past interactions, a feature known as path dependency. In this PICO talk I will explain path dependency in socio-hydrological systems in more detail and how an understanding of our past is essential to make future projections in our complex world.