

## **Climate change, climate extremes and water - Socio-economic impacts and adaptation potential**

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Dr. Ilona M. Otto will present her work on modeling social-ecological system interactions and its applications to assessing adaptation to water extremes such as drought and floods. Her presentation will draw on her experience in carrying out water management projects in Europe and Asia. She will discuss the impacts of water extremes on socio-economic development and the adaptation potential. Water availability and quality is affected by climate and land use factors and also by the use of water for economic and agricultural production as well as the number of population, their socio-economic status, and the availability of technology. Dr. Otto will discuss the concept of integrated management of water resources and how it could be used for a sustainable improvement of water availability and water quality. Dr. Otto will share lessons she learned from using novel approaches in data integration including experimental approaches, expert elicitation and modelling exercises. Simulations and modelling exercises can help to assess the impacts of socio-economic and environmental changes and to explore management and adaptation solutions.