
Climate change and the concomitant increase of extreme events with massive consequences for human populations, economic assets and critical physical infrastructures have exposed weaknesses in current water governance and management. This has increased the awareness of uncertainties, the complexity of the systems to be managed, and the need for profound changes in policy and management paradigms, as well as governance systems. Governance and management need to be adaptive to be able to deal with uncertainty and surprise.

The seminar will review our current understanding of factors that influence the adaptive capacity of water governance regimes and how to analyse and support transformative change. A conceptual framework has been developed over the past year which addresses the dynamics and adaptive capacity of resource governance regimes as multi-level learning processes. Change is conceptualized as multi-level learning that proceeds in a stepwise fashion moving from single to double to triple loop learning. Informal networks are considered to play a crucial role in such learning processes. The seminar will introduce the framework and show how it can be operationalized and applied to comparative case study analyses. Results from empirical analyses support the importance of polycentric system structures and informal networks. A promising way to improve our knowledge base may be a two-track approach combining exploratory analyses of a large number of cases with in-depth analyses focusing on aspects that have proven to be critical.