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Is Nevada ready? Evaluating the resilience and adaptive capacity of Nevada's policy sub-systems to climate change

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Adaptive capacity and resilience are concepts used to better understand the ability of socio-ecological systems to adapt to, or avoid, the potential negative effects of environmental change. This presentation will examine a variety of studies that have been conducted to assess the adaptive capacity and resilience of Nevada's water policy sub-systems to changing hydro-climatic regimes. Resilience as a general concept is the ability of the system to recover, or bounce back from, an exogenous stress. Adaptive capacity is the inherent potential to change to new environmental conditions. As applied to policy analysis this project defined the resilience of a policy sub-system as the "inherent potential of the system to avoid, or recover from, a negative impact to the system without reducing, or even improving, the delivery of public good and/or service". The project developed a methodological framework for measuring policy sub-system resilience, termed decision node analysis, that draws on institutional analysis, network theory, and policy sciences. The framework was applied at multiple scales, with analysis conducted of state-level networks of interaction on climate policy and a comparative analysis of two urban water sub-systems. The comparable unit of analysis is the policy provisioning/production system and the specific actors within the policy network focused around a specific public good or service. Results reveal gaps in the structure of state-level networks, surprising resilience in large scale sub-systems, and specific areas of vulnerability at local and regional scales.