



Hydrology, society, change and uncertainty

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Heraclitus, who predicated that “panta rhei”, also proclaimed that “time is a child playing, throwing dice”. Indeed, change and uncertainty are tightly connected. The type of change that can be predicted with accuracy is usually trivial. Also, decision making under certainty is mostly trivial. The current acceleration of change, due to unprecedented human achievements in technology, inevitably results in increased uncertainty. In turn, the increased uncertainty makes the society apprehensive about the future, insecure and credulous to a developing future-telling industry. Several scientific disciplines, including hydrology, tend to become part of this industry. The social demand for certainties, no matter if these are delusional, is combined by a misconception in the scientific community confusing science with uncertainty elimination. However, recognizing that uncertainty is inevitable and tightly connected with change will help to appreciate the positive sides of both. Hence, uncertainty becomes an important object to study, understand and model. Decision making under uncertainty, developing adaptability and resilience for an uncertain future, and using technology and engineering means for planned change to control the environment are important and feasible tasks, all of which will benefit from advancements in the Hydrology of Uncertainty.