IWRM Action Hub

RESOURCE

People and water: Understanding integrated systems needs integrated approaches

|

Author(s)
Carr, Gemma Barendrecht, Marlies Debevec, Liza Kuil, Linda Blöschl, Günter

Description / Abstract

As we rapidly modify the environment around us, researchers have a critical role to play in raising our understanding of the interactions between people and the world in which they live. Knowledge and understanding of these interactions are essential for evidence based decision-making on resource use and risk management. In this paper, we explore three research case studies that illustrate co-evolution between people and water systems. In each case study, we highlight how different knowledge and understanding, stemming from different disciplines, can be integrated by complementing narratives with a quantitative modelling approach. We identify several important research practices that must be taken into account when modelling people-water systems: transparency, grounding the model in sound theory, supporting it with the most robust data possible, communicating uncertainty, recognising that there is no ‘one true model’ and diversity in the modelling team. To support interdisciplinary research endeavours, we propose a three-point plan: (1) demonstrating and emphasising that interdisciplinary collaboration can both address existing research questions and identify new, previously unknown questions at the interface between the disciplines; (2) supporting individual interdisciplinary learning at all career stages and (3) developing group practices and a culture of interdisciplinary collaboration.

Publication year
2020

Publisher
International Water Association - IWA

Thematic Tagging
Climate Ecosystems/Nature-based solutions Gender Private Sector Transboundary Urban Water services
Language English
View resource

Source URL: https://beta.toolbox.venthic.com/resource/people-and-water-understanding-integrated-systems-needs-integrated-approaches