

# IRPUD FOKO

**Research Colloquium**  
**Tuesday, 18:00 Uhr**  
TU Dortmund • Campus Süd  
GB III • Room 214

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### **Water Scarce City - A Green Future for Urban Water Supply?**

Water seems to be ubiquitous on our planet, but freshwater is in fact very limited. Its uneven distribution results in 40% of the global population being affected by water scarcity. (United Nations, 2017) In the face of growing cities and increasing freshwater-related risks of climate change (IPCC, 2014), water supply in semi-arid regions appears to be a hopeless endeavor. However, Low Impact Development (LID) controls used for rainwater harvesting might offer relief, as they might contribute to increase drought resilience of the urban water supply through freshwater substitution.

The East Village neighborhood of San Diego, a growing and highly urbanized part of the driest region of the US, is applied as a case study (SANDAG, 2013; Garfin et al., 2014). The neighborhood's water supply system is enhanced for modeling purposes by applying green roofing to flat roofs and bioretention areas to open spaces. The assessment is being made by looking into the volumes of stormwater retained and its quality after being treated by LID controls.

The Research Colloquium (FOKO) addresses students, faculty members, and practitioners. Its aim is to explore new research fields, to build links between research projects and to show new ways for the development of spatial planning as a science.

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