
GCSC Seminar Series

Tuesday, February 25, 2020
4:00-5:00 PM

210 ASB
(Aline Skaggs Building)
ALL ARE WELCOME

Refreshments & meet
the speaker at 3:45

Nancy Grimm

Julie Ann Wrigley Global Institute of Sustainability, Arizona
State University

"Rivers of our dreams: water futures in urban central Arizona"



Discussing the challenge and process of co-producing positive future visions for water systems in a desert city, and exploring the tradeoffs associated with alternative visions.

Abstract

Climate change is one of the greatest challenges to global sustainability, with extreme events being the most immediate way that people experience this phenomenon. Urbanization is increasing and climate change is an emerging threat. These two realities of the 21st century are on a collision course. The Urban Resilience to Extremes Sustainability Research Network is working with city practitioners to improve resilience and envision positive futures for US and Latin American cities. In Phoenix, this work benefits from 20 years of research in the CAP LTER program, which formed the basis for regional scenarios co-developed with governmental, non-governmental, civic leader, and academic partners. To set the stage, I will present an overview of the water-related research in Phoenix of my group and others, and then I will describe the co-produced future scenarios for the region and for South Mountain Village. I ask, how do the scenarios differ between these two scales, do they reflect true transformation or mere tweaks, and what tradeoffs are associated with different scenarios? Finally, I present a qualitative assessment that evaluates whether the scenarios improve resilience in the face of future extreme events.

Bio

NANCY B. GRIMM is an ecosystem ecologist and interdisciplinary sustainability scientist who studies interactions of climate change, human activities, resilience, and biogeochemical processes in urban and stream ecosystems. From 1997-2016 Grimm directed the Central Arizona–Phoenix LTER (CAP LTER), a pioneering interdisciplinary study of a complex metropolitan region whose conceptual models of social-ecological-technological systems expanded ecology. She now co-directs the Urban Resilience to Extremes Sustainability Research Network (URExSRN), working with cities to co-produce visions of resilient and sustainable futures, and the new NATURA network of international networks that focuses on nature-based solutions to urban resilience challenges in the Anthropocene. Grimm is a Member of the US National Academy of Sciences, Past President of the Ecological Society of America (ESA) and the Society for Freshwater Science (SFS), and a Fellow of American Association for the Advancement of Science, ESA, SFS, and the American Geophysical Union. She is an editor for *Earth's Future*, and editorial advisor for *Ecohydrology* and the *Journal of Urban Ecology*. She is the Virginia M. Ullman Professor of Ecology in the School of Life Sciences, distinguished Sustainability Scientist in the Julie Ann Wrigley Global Institute of Sustainability, and Regents Professor at Arizona State University.