

## Outdoor Water Use as an Adaptation Problem: Insights from North American Cities

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**Speaker:** Professor Patricia Gober  
School of Geographical Sciences and Urban Planning,  
Arizona State University

**Chair:** Dr Winston Chow, Department of Geography, NUS

**Date/Time:** Friday, 9 October 2015, 3.30pm – 5.00pm

**Place:** Earth Lab (AS2 02-03), Department of Geography, NUS

### Abstract

Over the past 20 years, efforts to influence the efficiency and timing of urban indoor water use through education, technology, conservation, reuse, economic incentives, and regulatory mechanisms have enabled many North American cities to accommodate population growth and buffer impacts of drought. It is unlikely that this approach will be equally successful over the next 20 years because the source of conservation will shift from indoor to outdoor use. Outdoor water is climate sensitive, difficult to measure, hard to predict, linked to other components of complex and dynamic urban resource systems, imbued with behavioral and cultural dimensions, and implicated in societal conflicts about climate risk, modern lifestyles, social justice, and future growth. We assert that conserving outdoor water is not a traditional management problem focused on the water sector, assuming a stationary climate, and set aside from public debate. Instead, outdoor water is an adaptation problem, involving complex and uncertain system dynamics, the need for cross-sector coordination, strategies for dealing with climatic uncertainty, and mechanisms for engaging stakeholders with differing goals. Although North American water systems remain grounded in the management paradigm, there is increasing need for an adaptation perspective to tackle the particular challenges of outdoor water.

### About the Speaker



Patricia Gober received a PhD in Geography from the Ohio State University in 1975 and is currently Interim Director of the School of Geographical Sciences and Urban Planning at Arizona State University, Emeritus Professor of Geographical Sciences at ASU, and Emeritus Professor in the Johnson-Shoyama Graduate School of Public Policy at the University of Saskatchewan in Canada. She was the Founding Director of the National Science Foundation's Decision Center for a Desert City which studies water management decisions in the face of growing climatic uncertainty in Greater Phoenix. Her current research centers on issues of water management, governance, and environmental change in metropolitan Phoenix and Western Canada. She is especially interested in the use of science, modeling, and visualization for real-world decision-making. She is a past President of the Association of American Geographers, former member of the Population Reference Bureau's Board of Trustees and the Science Advisory Board of NOAA, and former Chair of the College Board's Advanced Placement Human Geography Committee. Her most recent book, *Metropolitan Phoenix: Place Making and Community Building in the Desert*, was published by the University of Pennsylvania Press in 2006. She holds an honorary doctorate of science from Carthage College in Kenosha, Wisconsin, is a fellow of the American Association for the Advancement of Science, and was awarded the Prince Sultan Abdulaziz International Prize for Water in November, 2008, the ASU Alumni Association's Faculty Research Award in 2009, and the AAG Presidential Achievement Award in 2011.

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