

# OLD SCHOOL GREEN INFRASTRUCTURE FROM A TO Z: Acequias to Zuni Bowls



**A** Acequia  
contemporary application I

El Parque del Rio - Stormwater Acequia and Public Orchard  
Santa Fe, NM (© Surroundings Studio)

## SESSION DESCRIPTION

El Agua es Vida. Water in a world facing climate change and decades of misappropriation heightens the critical need for a re-examination of our water infrastructure. In this ASLA 2014 education session, we will introduce you to the rich trove of regionally historic precedents for Green Infrastructure found across the world. From so many examples in the speakers own backyard of the Southwestern United States, to Central and South America and beyond, we will present ancient systems from acequias to Zuni bowls, and their functionally simple relationships around water.

Our intention is to reveal a multiplicity of unique, and possibly unknown, methods for how our ancestors creatively responded to catching, carrying, and concentrating water used for erosion control, recharge, and irrigation.

We will first introduce you to the inspirational landscape the presenters live in and how its unique land forms, climate, and history have informed our work in the Southwest. We will then present our growing encyclopedia of historic techniques, as well as stories around several of the methods. And we will provide examples, both built and unrealized, of how these remarkably simple strategies are inspiring professionals to create successful, modern green infrastructure projects rooted in this rich history that is often unrealized or ignored.

## LEARNING OBJECTIVES

1. Become informed of the historic precedents for green infrastructure found all over the world in order to connect to a wealth of techniques developed by past generations.
2. Understand the function and constructed form of these historic techniques evolved by generations of humans to develop a technical understanding potentially applicable to your own work.
3. Experience how landscape architects, engineers, and regulators have worked together to create successful green infrastructure projects today rooted in a rich tradition of historic techniques.
4. Explore other water stories with session participants to learn more about local histories, thereby informing us of other regionally relevant green infrastructure approaches.

## SELECTED RESOURCES

1. "Green Infrastructure for Southwestern Neighborhoods", Watershed Management Group, Tucson.
2. "LID Low Impact Development, A Design Manual for Urban Areas", University of Arkansas
3. Quivira Coalition, <http://www.quiviracoalition.org/>
4. "Constructed Wetlands in the Sustainable Landscape" by Craig Campbell & Michael Ogden
5. "Rainwater Harvesting for Drylands and Beyond", Brad Lancaster
6. "Permaculture - A Designer's Manual", Bill Mollison
7. "Enduring Acequias", Juan Estevan Arellano

# OLD SCHOOL GREEN INFRASTRUCTURE FROM A TO Z: Acequias to Zuni Bowls

## PRESENTERS

KENNETH FRANCIS, ASLA, RLA, RA



surroundings

Kenneth is a founding partner of Surroundings, a New Mexico based multidisciplinary landscape architecture design studio. He holds a Bachelor's in Architecture from The Cooper Union and a Master's degree in Landscape Architecture from Harvard's Graduate School of Design. While at Harvard, he received a grant to research the historic and cultural landscape of acequias in Northern New Mexico. As a result, his studio's work focuses on sustainable water practices in every project. Kenneth has presented on green infrastructure at multiple events. He has been interviewed on PBS and recently spoke at the Innovative Stormwater Infrastructure Conference for NMASLA. He was also profiled in Smithsonian Magazine for the stormwater design features of El Parque del Rio, a newly completed example of green infrastructure along the Santa Fe River.

ERIN ENGLISH, PE, LEED AP



Biohabitats  
SOUTHWEST BASIN & RANGE BIOREGION

Erin is a senior engineer and bioregional team leader of the Santa Fe offices of Biohabitats, a national firm dedicated to ecological restoration, conservation planning and regenerative design. She focuses her chemical engineering background on integrating process-design with natural systems approaches for water planning, wastewater treatment, stormwater management, and reuse. Erin has led holistic water planning and design projects across a range of project types and scales, helping to optimize the potential of integrated water system infrastructure in the built environment. Notable projects include Sidwell Friends School in Washington, DC and Domenici Courthouse in Albuquerque. She has shared her experience through speaking engagements at gatherings that include national GreenBuild, ASLA, Bioneers and Living Futures conferences.

STEVE GLASS, CMS4S, CPSWQ



CUADAD SOIL & WATER  
CONSERVATION DISTRICT

Steve worked with the City of Albuquerque and the Albuquerque-Bernalillo County Water Utility Authority, managing programs in regulatory compliance, environmental labs, biosolids composting, and constructed wetlands research for 20 years. As the former Bernalillo County Water Resources Planner, Steve managed the NPDES Phase II stormwater quality program. For 12 years, he represented local governments on the NM Water Quality Control Commission. He serves as Chair of the Ciudad Soil and Water Conservation District Board, and represents seven SWCDs on the NM Soil and Water Conservation Commission. Steve has an MS in Biology from NM State University. Steve organized regional, Arid LID Workshops from 2010-2012 and has spoken at numerous conferences. Recently, he presented "Green Infrastructure and Low Impact Development in Arid Climates."