SUSTAINABLE DRAINAGE:
THE INTERSECTION OF PERFORMANCE & EXPERIENCE IN THE LANDSCAPE

More than ever, sustainable drainage affects the way that a site looks and feels. Function and performance are standards for sustainable drainage, but there is a compelling need for stormwater strategies that emphasize aesthetic and social engagement in everyday life. Using projects in the US and Canada, this session examines the possibilities for creative overlap between civil engineering and landscape design.

LEARNING OBJECTIVES
• Reinforce the need for drainage strategies that conserve resources while also enhancing human experience.

• Give an overview of past, current and future stormwater drainage practices that affect landscape design.

• Show how drainage is a resource in site design, improving ecological performance and landscape resilience.

• Examine the collaborative environment that allows progressive technology to inform progressive design.
PRESENTATION OUTLINE

A) AN OVERVIEW OF STORMWATER MANAGEMENT PRACTICES
   • What stormwater management looked like in a pre-LEED world and why it couldn’t sustain itself.
   • How regulatory requirements are both the driver and passenger of ever-advancing stormwater management practices.

B) STORMWATER MANAGEMENT AS A KEY LANDSCAPE FEATURE
   • Strategies for collaborating: the thoughtful partnership.
   • Reading the site's functional and degraded natural systems: what do we have to work with?
   • Framing the problem: identifying constraints, opportunities and aspirations.
   • Research: taking chances, hedging bets.
   • The vision: what will make them want to come, stay, return?
   • Satisfying regulatory statutes: building trust with governmental agencies.

C) CASE STUDIES: EXPERIENCE AND PERFORMANCE IN LANDSCAPE
   • Lower Don Lands: Using water to make a neighborhood.
   • Brooklyn Botanic Garden: Reducing waste, increasing experience of place.
LAURA SOLANO
Laura Solano ASLA is a Principal at Michael Van Valkenburgh Associates in Cambridge, MA and an Adjunct Associate Professor at Harvard University’s Graduate School of Design. In practice for over 30 years, Laura has been an integral contributor to many of MVVA’s best-known landscapes, including: Teardrop Park, Restoration of the Whitehouse in front of Pennsylvania Avenue, the George W. Bush Presidential Center, Boston Children’s Museum Entry Plaza, and Brooklyn Bridge Park. She lectures across the US on technology, was on the Soils Committee for the Sustainable Sites Initiative and is an executive board member of the Landscape Architecture Foundation.

ROBERT ROCK
Robert Rock ASLA is a Senior Associate at Michael Van Valkenburgh Associates, in Brooklyn, NY. His work over the past decade has focused on the integration of landscape based stormwater solutions and sustainable site initiatives. While at MVVA, Robert has overseen the design and construction the Connecticut Water Treatment Facility, Teardrop Park South, and over twenty projects at Princeton University. Robert also led the firm’s winning design proposal for the ARC Wildlife Crossing Competition in Vail, Colorado. He has been a guest lecturer at Princeton University, Yale University, Colorado State University, and Iowa State University.

NICOLE HOLMES
Nicole Holmes is a Project Manager at Boston-based Nitsch Engineering, a registered professional engineer and a LEED Accredited Professional. Her work focuses on green infrastructure and stormwater master planning projects, including recent work for Princeton University, Harvard Business School and Dartmouth College. She also does sustainable site consulting services for projects such as Pittsburgh’s Frick Park Environmental Center. Nicole co-created NE’s proprietary RainUSE® Software program and she leads NE’s internal Stormwater and Sustainability Group.