



# ASCE-EWRG & APWA 2012 Sustainable Stormwater Symposium

September 19-20, 2012 World Trade Center, Portland, Oregon

### Day 1 - Wednesday, Sept. 19, 2012

7:30-8:00 am	Symposium Registration and Continental Breakfast (Provided)
8:00 am	Welcome and Opening Remarks
8:15-9:00	Challenges in Green Infrastructure Design and Associated Failure  Modes
	Robert Pitt, PhD, PE, Cudworth Professor of Urban Water Systems, Department of Civil, Construction, and Environmental Engineering, University of Alabama
9:00-10:00	SESSION 1 – Advances in Transportation Runoff Management
	Moderator: Eric Strecker – Geosyntec Consultants, Inc.
	Compost Amended Biofiltration Swale: A New Tool to Remove Dissolved Metals
	Mark Maurer, Washington State Dept. of Transportation
	Stormwater Management along High Traffic Streets: It's Not a Walk in the Park
	Ivy Dunlap, City of Portland, Bureau of Environmental Services
10:00-10:15	BREAK

10:15-12:15

### SESSION 2 – Retrofitting Existing Development

Moderator: Heidi Blischke, GSI Water Solutions

### Retrofitting Stormwater Ponds for Improved Water Quality Performance in Kitsap County, Washington: Techniques, Tools, and Examples for a Wide Range of Retrofit Options

Kathryn Skelton, Herrera Environmental Consultants and Scott Murphy, Kitsap County

### Hydrogeologic Evaluation of a Combined GSI and Deep UIC Well Infiltration System for Flow Control – Venema NDS Project, Seattle, Washington

Curtis Koger, Jennifer Saltonstall, and Susan Beckham, Associated Earth Sciences, Inc.; Jeff Massie and Masako Lo, Seattle Public Utilities; and Kathy Gwilym, SvR Design Company

### Storage and Recovery of Rooftop Rainwater Runoff Using Drinking Water Wells

David Embleton, GeoRain

Private Property Retrofits for Combined Sewer Capacity Relief Josh Robben, City of Portland, Bureau of Environmental Services

12:15 pm	LUNCH (Provided)
1:00-1:45	Mommas Don't Let Your Babies Grow Up to Be Modeling Cowboys Scott Wells, PhD, PE, Department Chair and Professor of Civil and Environmental Engineering, Portland State University
1:45-3:15	SESSION 3 – Model and Database Applications
	Moderator: Alissa Maxwell, OTAK

Groundwater Protectiveness Modeling, City of Portland UICs Heidi Bilshke, GSI Water Solutions, Inc.

Towards Predicting the Occurrence of Geysers and CSOs in Combined Sewer Systems - An Experimental, Theoretical, and Numerical Approach

> YunJi Choi, Graduate Student and Arturo Leon, Ph.D., P.E., Assistant Professor, Water Resources Engineering School of Civil and Construction Engineering Oregon State University

### BMP Performance Simulation with Empirical Support of the International Stormwater BMP Database

Eric Strecker and Marc Leisenring, Geosyntec Consultants

3:15-3:30 BREAK

3:30-5:00

### SESSION 4 – Education and Community Involvement

Moderator: Bill Owen, City of Portland, Bureau of Environmental Services

#### Regional Coordination on Private Stormwater Facility Maintenance Guidance

Dawn Hottenroth, City of Portland, Bureau of Environmental Services and

Candace Stoughton, East Multnomah Soil and Water Conservation District

### Students Stewarding Stormwater Bioretention Facilities: Curriculum Development and Maintenance Practices

Ted Hart, PhD Candidate and Steven Braun, Graduate Student Environmental Science & Management, Portland State University

Runoff Management in Developing Countries: A Global Perspective Mark Kennedy, Associate Professor of Civil Engineering, University of Portland

#### 5:00 pm

### POSTER SESSION AND HAPPY HOUR (Included w/ Registration)

Advanced Treatment of Petroleum Hydrocarbons, Carcinogenic Polycyclic Aromatic Hydrocarbons, and Arsenic for Discharge to Surface Water during Redevelopment of a Contaminated Site

Pete Kingston, SoundEarth Strategies

### Stormwater Retrofits for Urban Stream Protection Doug Wise, City of Vancouver

Side by Side Cost Comparison of Low Impact Development and Conventional Stormwater Management Facilities  $Ashley\ Cantlon,\ OTAK$ 

Hydrogeologic Evaluation of GSI and Deep UIC Well Infiltration Systems to Reduce CSO Events, Barton Basin, Seattle, Washington

Jennifer Hilden Saltonstall, Associated Earth Sciences, Inc.

City of Albany's Approach to Assessing Their Streams and Evaluating
Protection Measures
Atalia Raskin, Cardno

New Flow Control Credits for Trees
Jen Gillenwater, Wallis Engineering

Design Chellenger and Salutions for Venetated Feeilite D

Design Challenges and Solutions for Vegetated Facility Retrofits Ryan Makie, Vigil-Agrimis, Inc.

### Day 2 - Thursday, Sept.20, 2012

7:30-8:00	Continental Breakfast (Provided)
8:00 am	Session Introduction
8:15-9:00 am	Sustainable Stormwater in Seattle: Moving from Pilot Projects to a Citywide Program
	Tracy Tackett, P.E., Green Stormwater Infrastructure (GSI) Program Manager, Seattle Public Utilities
9:00-10:00	SESSION 5 – Green Infrastructure Case Studies
	Moderator: Angela Wieland, Brown and Caldwell
	SE Clay Green Street Project: Route to the River
	Alice Coker, City of Portland, Bureau of Environmental Services
10:00-10:15	BREAK
10:15-12:15	SESSION 6 – Stormwater/Watershed Planning
	Moderator: Paul Worrlein, HDR

### The Clark County Stormwater Capital Improvement Program: Flow Restoration Credits and the Path to Sustainable Water Resource Management

John Milne, Clark County Department of Public Works

### City of Portland Watershed Health Index

Mike Rosen, City of Portland, Bureau of Environmental Services, Watershed Division

#### North Bethany Stormwater Implementation Plan

Jadene Stensland, Clean Water Services

## Create a Stormwater Utility in the Midst of a Recession: Are You Crazy? A Case Study in Salem, Oregon

Robert Chandler, City of Salem Public Works

12:15 pm	LUNCH (Provided)
1:30 - 5:00	Bike-BMP-n-Brew (B³) Tour (Included w/ Registration)  Around Southwest/Southeast Portland
5:00 pm	Social Hour (Included w/ Registration) Green Dragon
	928 SE 9th Avenue, Portland, Oregon