



# ***Reining in the Rain:***

*Watershed-Friendly “Low Impact Development”  
Site Design, Permeable Pavements, Planning and  
Funding Strategies for Stormwater Management*

## **SF Bay Area Workshop**

SF Bay Regional Water Quality Control Board, Oakland

**Wednesday, April 23, 2008**

**9:00 am – 4:00 pm**

*Sponsored by the California Coastal Commission; Center for Water & Land Use at UC Davis Extension; USC Sea Grant; and SF Bay Regional Water Quality Control Board; in association with the California Stormwater Quality Association; California Coastal Conservancy; San Francisco Estuary Program; San Francisco Bay Conservation and Development Commission; and Association of Bay Area Governments.*

### **AGENDA**

**8:00 - 9:00 am**      *Check-in (coffee and pastries provided)*

**9:00 - 9:10**            **Welcome**  
*- Alfred Wanger, California Coastal Commission*

**9:10 - 9:30**            **Resource-Based Land Use Planning**  
The big picture: Linking land use to water quality, and how LID can help improve the health of our watersheds.  
*- Alfred Wanger, California Coastal Commission*

**9:30 - 10:00**        **Low Impact Development – the How's and the Why's**  
Implementation of soil-based LID systems in stormwater management, and effect on flooding, in-stream erosion, maintaining the water balance, and pollutant removal.  
*- Timothy Lawrence, Center for Water and Land Use, UC Davis Extension*

**10:00 - 10:15**        *Break (15 min)*

**10:15 - 10:45**        **LID for Stormwater Treatment and Hydromodification Management**  
Design considerations for use of LID techniques to address stormwater treatment and hydromodification management requirements for development projects.  
*- Jill Bicknell, EOA, Inc., California Stormwater Quality Association*

**10:45 - 11:15**        **Regional Perspective on LID Regulation & Implementation**  
LID's role in regional water quality protection, water sustainability, and addressing climate change impacts.  
*- Bruce Wolfe, San Francisco Bay Regional Water Quality Control Board*

**11:15 - 11:45**        **LID and Flood Control**  
The challenges of regional stormwater management and the role LID can play in meeting those challenges.  
*- Mitch Avalon, Contra Costa County Flood Control and Water Conservation District*

**11:45 - 1:00**        *Lunch (on your own)*

## **Two Afternoon Tracks (Choose One)**

### **Track A – Permeable Pavements *plus* Stormwater NPDES Compliance**

Technical information on permeable pavement design, installation, applications, performance, pollutant removal, and maintenance; plus Stormwater NPDES compliance.

**1:00 - 1:30**

#### **How to Use Permeable Pavements in All Soil Types**

The fundamentals of using permeable pavements to implement LID cost-effectively, with details on performing hydrological design for any type of soil situation – even clay soils.

- *Andy Youngs, California Nevada Cement Association*

**1:30 - 2:00**

#### **Porous Asphalt Pavements**

- *Brandon Milar, California Asphalt Pavement Association*

**2:00 - 2:30**

#### **Permeable Interlocking Concrete Pavements**

- *Andy Youngs, presenting for David R. Smith, Interlocking Concrete Pavement Institute*

**2:30 – 2:45**

*Break (15 min)*

**2:45- 3:15**

#### **Pervious Concrete Pavements**

- *Andy Youngs, California Nevada Cement Association*

**3:15 – 4:00**

#### **Stormwater NPDES Compliance for New Developments Using LID**

LID design of commercial developments and residential subdivisions to achieve cost-effective compliance with treatment and hydrograph modification requirements.

- *Dan Cloak, Dan Cloak Environmental Consulting*

**4:00**

#### **Wrap-Up and Evaluations**



### **Track B – Learn, Plan, and Act on Local LID**

**1:00 – 1:45**

#### **Land Use Designation and Planning Approaches**

Land use designation and comprehensive planning approaches to nature-friendly development practices

- *Kathleen Van Velsor, Association of Bay Area Governments*

**1:45 – 2:30**

#### **Natural Green Solutions Approach**

Innovative natural Green Solutions approach to addressing polluted runoff

- *Esther Feldman, Community Conservancy International*

**2:30 – 2:45**

*Break (15 min)*

**2:45 – 3:45**

#### **Stormwater Funding Strategies, with Panel Discussion**

Strategies to overcome Prop. 218 – Fees, taxes, assessments, bond measures, loans, and grants.

- *Robert D. Spencer, MuniFinancial*

- *Susan Gladstone, San Francisco Bay Regional Water Quality Control Board*

- *Mitch Avalon, Contra Costa County Flood Control and Water Conservation District*

**3:45 – 4:00**

#### **Wrap-Up and Evaluations**

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➤ Handouts and presentations will be available at [http://www.coastal.ca.gov/nps/lid\\_workshops.html](http://www.coastal.ca.gov/nps/lid_workshops.html).