

## **Draft - One Day LID Workshop Agenda**

- 8:00-8:30 Registration
- 8:30-9:00 Welcome / Introductions / Purpose of Workshop / Local & State Initiatives
- 9:00 -10:00 A Comprehensive Overview
- What is LID (Philosophy and Ecological Processes)
  - Limitations of Conventional Approaches
  - LID Basic Principles and Practices
    1. New Development
    2. Urban Retrofit
- 10:00 –10:15 Break
- 10:15 – 12:00 Site Planning Techniques (Residential / Commercial)
- 12:00 - 1:00 Lunch
- 1:00-1:30 LID Hydrology and Hydraulics
- Analytical Principles and Modeling Tools
- 1:30 – 2:30 Redevelopment and Urban Retrofit
- Case Studies
- 2:30 – 2:45 Break
- 2:45 - 3:45 Bioretention / Rain Gardens & Other LID Practices
- Design, Construction and Maintenance
  - Public Acceptance
- 3:45 – 4:15 Lessons Learned
- Institutional and Regulatory Roadblocks
  - Regional hydrology, geology and climate issues
- 4:15 – 5:00 Facilitated Discussion q&a  
LID Center Web (Interactive Website)
- 5:00 Adjourn

## **LID Workshop Description**

### **Purpose**

Low Impact Development (LID) is the general term typically used to characterize a comprehensive array of site planning, design and pollution prevention strategies that when combined create a more economically sustainable and ecologically functional urban landscape. LID uses a decentralized at the source approach to manage stormwater management by integrating hydrologic and water quality functions into all aspects of the urban landscape and infrastructure. LID's decentralized management creates a multifunctional urban landscape that maintains and restores the ecological integrity of receiving waters while reducing construction, maintenance and inspection costs.

This workshop offers an in-depth introduction to the economic benefits, ecological goals, planning techniques, design principles, analytical methodologies, and implementation strategies and monitoring results of the innovative LID technology for urban stormwater management. Attendees will gain an in-depth technical understanding of how to apply integrated management practices to meet local watershed protection and water resources restoration protection goals and regulatory requirements.

### **Learning Objectives**

- Provide a comprehensive overview of LID's unique philosophy, principles, practices and processes.
- Discussion of a watershed's ecological processes vital to protecting receiving waters and aquatic living resources.
- Establishing ecologically based watershed management and site design goals and objectives.
- Understanding the technical, practical and economic limitations of LID and conventional BMP's.
- Planning, design, construction and maintenance guidelines for LID practices and their applications to residential, commercial and industrial development.
- Discussion of available analytical tools and models for LID.
- The use of LID for urban retrofit to address TMDL's, CSO, source water protection, and restoring urban waters.
- LID program implementation strategies for local governments.
- How LID can meet NPDES permit requirements.
- Roadblocks to implementation.
- Overview of monitoring results.
- How LID fits within the context of overall watershed planning and regional water quality systems.
- Demonstrate and discuss LID's applications to California's unique and diverse geology, hydrology and ecosystems.

### **Who Should Attend**

This new technology involves multiple disciplines and has far reaching impacts in urban stormwater management, land use planning, water resources protection, site planning/design, best management practices, building requirements, construction and maintenance of stormwater infrastructure. LID will be of interest to local, state and federal government administrators and regulators; developers, builders, contractors; land use/development planners, civil/environmental engineers, landscape architects; environmental professionals/consultants; environmentalists and interested citizens.

### **Workshop Training Approach**

The workshop will be taught through interactive lectures, handouts and case studies. The class is being conducted under sponsorship of the Low Impact Development Center, Inc. a national nonprofit organization working with local, state and federal agencies and watershed groups on the research, development and implementation of LID technologies, projects, programs, modeling and monitoring. Mr. Larry S. Coffman who has over 30 years of experience in urban stormwater management and is considered the nation's foremost expert on LID technologies and programs will conduct the training. Mr. Coffman was a founder of the LID Center; pioneer of Bioretention (Rain Gardens) and the principle author of the nationally acclaimed Prince George's County, Maryland's LID planning and design manuals. Mr. has conducted numerous workshops and training seminars on LID both nation and internationally for the Department of Defense; ASCE; municipal, county and state governments; regional authorities; universities; watershed protection groups; and private consulting firms. He is a member of American Society of Civil Engineer's, EWRI, Urban Water Resources Research Council and serves on the Water Environment Research Federation's, Stormwater Technical Advisory Committee.