



STORMWATER BEST MANAGEMENT PRACTICES (BMPs) New Development/Significant Redevelopment Projects

WORKSHOP May 4, 2011

Background

The Fourth Term NPDES Municipal Permit (Order No. R9-2009-0002) requires South Orange County Permittees to adopt their own local Jurisdictional Runoff Management Program (JRMP) and Local Standard Stormwater Mitigation Plan (SSMP) incorporating all requirements of the Model SSMP, and amending ordinances as necessary. The Local SSMP will be used as a guide for review and approval of Water Quality Management Plans (WQMPs) for New Development and Significant Redevelopment projects. Much of the South Orange County Watershed Management Area (WMA) is highly urbanized and can pose a challenge when requiring incorporation of Low Impact Development (LID) Best Management Practices (BMPs) to achieve compliance with the new requirement. LID BMPs include site design, infiltration, evapotranspiration, biofiltration and promotes management of stormwater onsite.

Purpose

This workshop is educational in nature and seeks to provide information on the efficacy of onsite storm water capture and treatment, regulations triggering stormwater BMP incorporation, systems in place in the watershed, and lessons learned/appropriate selection of BMPs.

Audience

We wish to target municipal engineers and planners, and owners and managers of properties with large hardscape areas, including corporate headquarters, corporate distribution centers, shopping malls, apartment complexes, and institutions. We will ask municipalities to identify and invite those property owners whom they feel would benefit from this workshop.

Format

The workshop will consist of a series of morning panels presenting information followed by lunch and then a carpool tour of four sites in South Orange County that have employed different stormwater BMPs. The tour sites identified are:

Mission Viejo Community Center in Mission Viejo: integrated water quality feature in parking lot

San Juan Capistrano City Hall: bioswale detention system

Capistrano Bay Community Services District in Dana Point: BMP porous asphalt

Donal S. Russell, General Manager, will be our guide on site

Timeframe

8:00am to 3:30pm

Venue

Saddleback Conference Room, Mission Viejo City Hall
200 Civic Center
Mission Viejo, CA

AGENDA

- 8:00am – 8:30am Registration.
- 8:30am -8:45am **Welcome by workshop hosts:** OC Watersheds Program and LASGRWC
Marilyn Thoms and Nancy Steele
- 8:45am – 9:00am **Workshop Overview** – Mary Loquvam
- 9:00am – 9:45am **LASGRWC Water Augmentation Study and Results** – Do capture and ground infiltration of stormwater work at cleaning constituents from stormwater? How and where has this been studied locally? What are the results? Nancy Steele and Edward Belden will discuss the Watershed Council's eight-year study of the efficacy of infiltrating water into the ground as a method for naturally treating contaminated stormwater.
- Nancy Steele, Executive Director of the Los Angeles & San Gabriel River Watershed Council & Edward Belden, Water Programs Director
- 9:45am – 10:30am **What's in the Ground Locally?**
What and where are local examples of BMPs in the ground? Are they working? How large an area do they treat? What do they treat? How much did they cost? How long will they last? Are they in compliance? This panel will describe BMPs they have placed in South Orange County in the past several years and answer these questions.
- Arroyo Trabuco Golf Course – Sam Ali County of Orange, OC Public Works
- Mission Viejo Community Center– Larry Ryan, RJM Design Group
- San Juan Capistrano City Hall – Francie Kennedy, City of San Juan Capistrano
- 10:30am – 10:45am **Break**
- 10:45am – 11:30am **What's in the Ground Session 2 and Lessons Learned**
How have projects held up? Have they met expectations? Were BMPs difficult to convince engineers to employ? This session will explore some of the Lessons Learned in incorporating LID solutions to projects.
- Ladera Ranch Riparian & Water Quality Control Stream – Hasan Nouri, Fluvialtech
- Capistrano Bay Community Services District – Liza Zawaski, City of Dana Point
- Mission Viejo - Joe Ames, City of Mission Viejo
- 11:30am – 12:15pm **Regulations and Triggers** – This panel will discuss the regulations related to Municipal Permit No.R9-2009-0002 issued by the San Diego Regional Board specifically related to the requirements for New Development and Significant Redevelopment. These requirements include runoff management and must include Low Impact Design principles and Hydromodification. Triggers include projects that add or replace at least 5,000 sq. ft. of impervious surface such as hillside developments, restaurants, parking lots, streets, roads, highways, automobile repair shops and retail gasoline outlets.
- Jennifer Shook, County of Orange Stormwater Program

12:15pm – 1:00pm Lunch and Networking:

1:00 pm – 3:30pm Tour of four sites,
Mission Viejo Community Center – Mission Viejo
Ladera Ranch Riparian and Water Quality Control Stream
San Juan Capistrano City Hall
Capistrano Bay Community Services District

3:30pm Return to Mission Viejo City Hall & Conclude