# PROPOSED CITY OF LOS ANGELES/ LOW IMPACT DEVELOPMENT (LID) ORDINANCE

Urbanization leads to increased hardscape, resulting in increased surface runoff and transport of pollutants to downstream receiving waters while reducing percolation to groundwater aquifers. Low Impact Development (LID) is a relatively new approach to managing stormwater and urban runoff while mitigating the negative impacts of development and urbanization. The proposed LID Ordinance focuses on Best Management Practices (BMPs) for site development — i.e., the landscaped areas around a building or development — as opposed to the building itself. In addition, the LID Ordinance would improve water quality and save billions of gallons of rainwater, thus offsetting the amount of imported drinking water. On an average day over 110 MGD of dry weather runoff from a variety of activities such as landscape irrigation runoff, street washing, car washing, illegal connections, hydrant flushing, construction runoff, and other commercial activities discharge directly into the City's waterbodies untreated and full of pollutants. On an average year, during the wet season, over 56 billion gallons of runoff flow untreated into our waterways.



Parkway Infiltration Swale at 11<sup>th</sup> St & Hope St – Los Angeles

Widespread implementation of LID will:

- improve water quality
- promote water conservation through rainwater harvesting
- increase water supply through groundwater recharge

# **Background:**

LID practices and ordinances have been adopted across the country; in our region, San Diego County (Jan 2008) and Los Angeles County (Oct 2008) have implemented LID practices. More importantly, the Los Angeles Regional Water Quality Control Board recently adopted the Ventura County Stormwater Permit, in which LID became a Permit requirement for the first time. It is expected that similar LID requirements will be imposed on the City in the new Stormwater Permit for Los Angeles County as well.



Planter Boxes at Versailles Luxury Apartments - Los Angeles

The proposed LID Ordinance will amend and expand on the existing Los Angeles Municipal Code, Stormwater Pollution Control Measures for Development Planning and Construction Activities — Standard Urban Stormwater Mitigation Plan requirements (SUSMP), to incorporate LID practices and standards.

## **Integral to Water Quality Compliance:**

Implementing LID builds on a number of ongoing programs and initiatives which have received previous council support, such as Green Streets and Green Alleys. More importantly, implementing LID is a key component in assisting the City in meeting its water quality standards set forth under Total Maximum Daily Loads (TMDLs). The concept of LID is consistent with the recommendations and strategies identified in the following City of Los Angeles approved Plans:



West L.A. driveway with grass to increase permeability

- Integrated Water Resource Plan (IRP)
- Santa Monica Bay Bacteria TMDL

- Water Quality Compliance Master Plan (WQCMP)
- Los Angeles River Metals TMDL Implementation Plan
- Ballona Creek Bacteria TMDL Implementation Plan Ballona Creek Metals TMDL Implementation Plan
- Department of Water and Power Water Supply Action Plan

## **Requirements:**

1. Under the City's proposed LID Ordinance, any Development / Redevelopment will be required to capture and manage 100% of the first ¾" storm event through onsite infiltration, capture and use, evapotranspiration, and high efficiency bio-filtration/bio-treatment BMPs to the maximum extent feasible.







Dec 14, 2009 - 1 -

- 2. The following are exempted from LID requirements:
  - Any Development / Redevelopment for which plans and complete permit application are accepted by the Department of Building and Safety for plan check;
  - Any entitlement application for a Development / Redevelopment filed with the
    Department of City Planning and deemed complete with the exception of CEQA
    review prior to the effective date of this ordinance. This exception shall no longer be
    valid if a building permit has not been obtained within two years from the effective
    date of this ordinance;
  - Any Development / Redevelopment that only creates, adds or replaces less than 500 square feet of impervious area;
  - Any Development / Redevelopment involving emergency construction activities required to immediately protect public health and safety;
  - Infrastructure projects within the public right-of-way;
  - Any interior building alteration or addition that does not expand the building footprint.
  - Use of Land Permits that require no addition to or alteration of existing impervious surfaces;
  - Re-striping of permitted parking lots; or
  - Any Development / Redevelopment not requiring a building permit.



Downspout connection to Rain Barrel

## Implementation:

Adoption of the proposed LID Ordinance will incorporate a plan review process that builds on the existing plan review process for the management of the City's SUSMP Program which has been in effect since 2002: Building and Safety refers applicable projects to Sanitation for review.

- Project applicants must submit an LID plan to the Bureau of Sanitation (SUSMP counter), identifying all LID requirements that will be incorporated into the development for approval. Applicants will also pay an applicable fee for the costs associated with plan review.
- Approved LID plans will require a maintenance covenant or agreement that will be recorded with the Los Angeles County Registrar-Recorder office prior to issuance of permits.
- Where compliance is technically infeasible, offsite mitigation may take place within the public right-of-way or pay an Offsite Runoff Mitigation Fee. Any fees collected will be used to implement water quality improvement projects within the same subwatershed, as identified in approved TMDL Implementation Plans or in offsite green infrastructure LID projects which have a water quality improvement aspect (such as green streets, green alleys and parking lots).
- Any Development / Redevelopment for which plans and complete permit application are
  accepted by the Department of Building and Safety for plan check and the appropriate fee is
  paid prior the effective date of this ordinance will be grandfathered.



Divert rain gutter to drain onto landscape rather than hardscape

### **Plan Review & Cost Considerations:**

#### **Major Developments**

The permitting / review process for major developments as well as the cost associated to comply with the proposed LID Ordinance is expected to be negligible for major Development / Redevelopment since they are currently required to comply with the regulatory SUSMP standards

### **Residential Developments**

The permitting / review process for residential (less than 4 units) developments will be streamlined by providing residents/designers guidance through a LID Handbook where they will be able to choose from a number of inexpensive City approved prescriptive BMPs that will satisfy the LID Requirements. The cost for a resident to comply with the LID requirements can be as small as \$15 for a downspout diverter which redirects water to the landscape instead of the driveway. At the option of the homeowner, they could pay \$250 to divert an existing downspout to a rain barrel where runoff from the roof can be collected and used for irrigation. Other optional prescriptive BMPs such as porous pavement and permeable pavers could be used. These options vary in cost as they are dependent on project size.





Dec 14, 2009 - 2 -