

# LOW IMPACT DEVELOPMENT – Frequently Asked Questions

## A. What is Low Impact Development (LID)?

- LID is an innovative, simple, and cost effective approach to land development and re-development that works in conjunction with natural processes to manage stormwater (rainwater that has hit the ground) and urban runoff (surface water from leaking sprinklers, hosing sidewalks, washing cars, etc.) as close to their sources as possible
- LID uses simple design techniques that allow for infiltration, evapotranspiration and capture for use
- LID is an alternative to traditional development practices which lead to an increase in hard or impervious surfaces such as rooftops, parking lots and driveways. These surfaces:
  - i. Result in increased surface runoff which moves pollution to storm drains, rivers, creeks, and ultimately, the ocean
  - ii. Reduce the ability of rainwater to percolate into groundwater aquifers, limiting our local water supply reliability



Driveway with grass to increase permeability

## B. Why do we need LID in Los Angeles?

- Stormwater is the number one reason our streams and local beaches are polluted
- We currently import the vast majority of our water supplies from distant sources. These sources will become more expensive and less available over time. We need a local, sustainable source of water
- Importing water from distant sources requires a lot of energy, which is costly and contributes to climate change

## C. How will LID help our community?

- Enhance the recreational and aesthetic values of the community through increased green infrastructure and open space
- Reduce frequency and severity of floods
- Contribute to groundwater recharge through infiltration, reducing our reliance on imported water
- Protect stream, lake and ocean water quality from large volumes of polluted runoff



Parkway Infiltration Swale  
11th St & Hope St – Los Angeles

## D. What are the economic benefits of LID?

- USEPA found that in most cases studied there were significant cost savings by using LID practices compared to traditional development practices.
- Increased land value from more open green space and trees
- Decreased spending on current and future environmental conservation programs
- LID will help to meet TMDL compliance deadlines and reduce pollution fines

**E. How would LID be implemented in the City of Los Angeles?**

- The ordinance was unanimously approved by the City of Los Angeles Board of Public Works and is headed to the City Council’s Energy and Environment Committee.
- The ordinance applies to projects that require building permits for new buildings and re-development projects over 500 square feet
- This ordinance builds upon SUSMP so that managing and capturing the ¾ inch storm for infiltration, evapotranspiration and/or capture for use is prioritized.
  - i. LID best management practices can be selected using the handbook provided by the Bureau of Sanitation. There is a lot of flexibility in how to meet these standards since there are many options for BMPs
  - ii. If a site is deemed infeasible for the implementation of LID, this ordinance provides the flexibility for the developer/property owner to provide off-site mitigation or in-lieu fees for the amount of runoff that leaves the property

**F. What are some examples of acceptable Best Management Practices (BMPs)?**

- Rain Garden – depressions that contain soil amendments and appropriate plants that promote both infiltration of stormwater and treatment of pollutants
- Grassy Swale – vegetated channels that slow stormwater runoff and promote infiltration, trap sediment, and help treat pollutants
- Downspout redirect – extension or bend in your existing gutter which redirects rain water to a grassy or permeable area
- Rain Barrels – tanks that attach to the end of your downspouts to collect rain water from your roof
- Porous Pavement – concrete or asphalt that allows rain to infiltrate, thereby reducing runoff and promoting groundwater recharge



Downspout connection to Rain Barrel

**G. How much will this cost?**

<b>Project</b>	<b>Size</b>	<b>LID requirement</b>	<b>Permit Fee</b>
New Development or redevelopment	Creates, adds or replaces <b>less than 500 sq ft</b> of impervious surface	Exempt	Exempt
New residential 4 units or less	Less than 1 acre	implement at least <b>two LID Best Management Practices (BMP)</b> alternatives listed in the LID Section of the Development BMP Handbook	\$200/project
New residential 4 units or less	<b>Greater than 1 acre</b> or in an Environmentally Sensitive Area (ESA)	100% of the rain from a three-quarter inch storm or less must be infiltrated or captured and used on site.	\$700/project
Small alteration of residential 4 units or less	Re-development or alteration of <b>less than 50%</b> of the impervious surfaces (e.g. rooftop or driveway) of an existing developed site	Implement <b>one LID BMP</b> listed in the LID Section of the Development BMP Handbook	\$20/project
Large alteration of residential 4 units or less	Re-development or alteration of at least <b>50% or more</b> of the impervious surfaces	implement <b>at least two LID BMPs</b> alternatives listed in the LID Section of the Development BMP Handbook	\$200/project
Residential 5 units or More and Nonresidential Developments $\geq$ 500 square feet	For redevelopment that results in an alteration of <b>less than 50%</b> of the impervious surfaces of an existing developed site	100% of the rain from a three-quarter inch storm or less must be infiltrated or captured and used on site.	\$800/project
Residential 5 units or More and Nonresidential Developments $\geq$ 500 square feet	For new Development ,or where Redevelopment results in an alteration of at least <b>50% or more</b> of the impervious surfaces of an existing developed site	100% of the rain from a three-quarter inch storm or less must be infiltrated or captured and used on site.	\$1000/project