

# Green Infrastructure Program

## Community Partner Profiles

2011 Partners

## REGION 9: Los Angeles, California

### Community Background

The City of Los Angeles is the second largest city in the nation, with over 3,500,000 people living in an area of about 500 square miles. The city has 6,500 miles of streets, 10,000 miles of sidewalks, 900 miles of alleys, and over 34,000 catch basins.

The growth of the city and the surrounding metropolitan area has transformed the area's water cycle and water systems. Eighty percent of the city's water demand is met by costly imports from distant watersheds. At the same time, extensive impervious cover and massive stormwater conveyance systems divert half of the rain that falls in the region to the sea. From the city's earliest days, urbanization exacerbated flooding of the Los Angeles River and its tributaries. After a series of devastating floods in the first decades of the 20<sup>th</sup> century, the Los Angeles River and many of its tributaries were channelized. Channelization of the Los Angeles River was completed in 1960 and formed a 51-mile engineered waterway.

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### Drivers for Green Infrastructure

The city of Los Angeles recognizes green infrastructure as a way to address several of its most pressing environmental and social concerns. Stormwater pollution, water scarcity, and flood events are important environmental problems that are exacerbated by conventional stormwater infrastructure. At the same time, the city is interested in increasing recreational opportunities and access to open space for its residents. Green infrastructure offers an opportunity to advance all these goals at once.

### Green Strategies and Programs

Los Angeles recently became a national leader in promoting low impact development. On September 28, 2011, the Los Angeles City Council unanimously passed the Los Angeles Low Impact Development Ordinance. The ordinance requires that all development projects greater than 500 square feet be designed to capture, reuse, or infiltrate the runoff generated by the first 3/4 inch of rainfall.

Los Angeles's Green Alleys Initiative demonstrates how reducing imperviousness and returning rainwater to natural pathways can advance multiple environmental and community objectives at once. Los Angeles has approximately 900 linear miles of alleys, most of which are entirely paved and exacerbate flooding and water quality problems. A 2008 study by the USC Center for Sustainable Cities also observed that alleys are concentrated in park-poor communities, where residents have few opportunities for recreation or outdoor physical activity. Given this strong connection between alleys and environmental and community health, the City of Los Angeles has initiated a program to introduce green infrastructure into urban alleys. By adding permeable pavement, bioswales, and drought-tolerant vegetation to urban alleys, the City can improve water quality, reduce flooding, and reduce water demand while creating recreational opportunities, increasing neighborhood connectivity, and even reducing crime (many residents perceive alleys as unsafe. Improving lighting and making alleys attractive would therefore help address safety concerns and encourage their use.) In September of 2009 Los Angeles completed the first step in implementing the program, publishing "[Green Streets and Green Alleys Design Guidelines and Standards](#)" to assist developers, designers, and engineers in designing and permitting green alleys.

Los Angeles has also recognized green infrastructure as a way to integrate the goals of reusing existing urban land, providing water quality and flood management, and providing more public spaces. Together with the Department of Recreation and Parks, the City Brownfields Team works to identify brownfield sites, remediate and restore contaminated land, and create natural spaces. These projects have the potential not only to provide open space and recreational opportunities, but to provide important links to environment amenities (such as the Los Angeles River) and transportation corridors (such as bus and light rail stops) as well.