

# **Green Infrastructure Program**





2011 Partners

# **REGION 8: Denver, Colorado**

### **Community Background**

The City of Denver sits at the eastern base of the Rocky Mountains in Colorado. Denver's downtown area is located at the confluence of Cherry Creek and the South Platte River. During times of heavy rain or snowmelt, these water bodies receive large flows of stormwater that carry a mix of contaminants, including bacteria, nutrients, and sediments.

# **EPA Contact**

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Denver is currently in the process of redesigning the the riverfront according to sustainable and green infrastructure principles. In 2010, the City of Denver was selected by EPA to become a partner for its Sustainable CommunitiesPartnership. In 2011, the city and several collaborators were also selected as EPA green infrastructure partners. The City and County of Denver, Denver Housing Authority, the Greenway Foundation, the Trust for Public Land, and the Urban Drainage and Flood Control District comprise EPA's partners in Region 8.

#### **Drivers for Green Infrastructure**

The city and its partners recognize that the quantity and quality of stormwater flowing into Cherry Creek and the South Platte River is impairing water quality and increasing flood risks for waterfront property. Green infrastructure offers cost-effective solutions that will both reduce stormwater volumes and treat stormwater pollutants.

## **Green Strategies and Programs**

Denver has an extensive history of brownfield redevelopment and restoration using green infrastructure principles. In 2008, the Denver Housing Authority (DHA) completed a small, EPA-funded brownfields cleanup project that redeveloped three acres of brownfield for unrestricted residential use. This project was part of a larger redevelopment effort known as the South Lincoln Development Project (SoLi). In 2009, the DHA along with other key players completed a Master Plan for the SoLi development, which emphasized land use management, energy, transportation, and public health. The SoLi project was later selected as an EPA Partnership for Sustainable Communities Project in 2010.

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The DHA partnered with the EPA Office of Brownfields and Land Revitalization, the EPA Office of Sustainable Communities, the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (DOT) to form the Denver Partnership for Sustainable Communities Brownfield Pilot project, which will continue to work with the DHA on the SoLi site. The project will include porous landscape detention, grass buffers and swales, porous pavement, planter boxes, and urban gardens to reduce the amount of runoff discharged into Cherry Creek and the South Platte River. A design charrette on stormwater and green infrastructure design was held in April of 2011. Denver and the DHA will continue to work on the SoLi development project with continued assistance from the EPA, HUD, and the DOT.

Denver has also worked closely with the Trust for Public Land (TPL) to provide more open space and access to waterfronts. TPL is working to acquire distressed land and assemble multiple contiguous parcels through partnerships with private development. By acquiring industrial and commercial land parcels and looking at aggregating stormwater detention systems, TPL and the city of Denver have succeeded in designating a greater portion of the land adjacent to the South Platte River as open space in the community master plan. The City of Denver, TPL and the EPA have also worked together to create a green infrastructure stream restoration design on a tributary to the South Platte River that ran through a vacant lot. Located in a low income community, the vacant lot is now a public park and community garden.

The City and County of Denver's sustainability plan, Greenprint Denver, has coordinated the planting of thousands of trees throughout Denver and works to preserve open space for the mitigation of stormwater and the enjoyment of the community.

Finally, Denver's Urban Drainage and Flood Control District is a national leader in the development of hydrologic models. Their most recent modeling software is offered to developers free of charge and allows them to directly model the effectiveness and design requirements for green infrastructure techniques like bioinfiltration and green roofs. Having ready access to this modeling software exposes developers to practices beyond traditional curb and gutter conveyances and allows them to generate estimates of effectiveness and maintenance needs. They're Volume 3 Best Management Practices details green infrastructure approaches to dealing with stormwater.

#### For more information:

The South Lincoln Development Project

The Trust for Public Land – Redfields to Greenfields

**Greenprint Denver** 

http://www.greenwayfoundation.org/web/index.php/planning/rviphttp://udfcd.org/

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