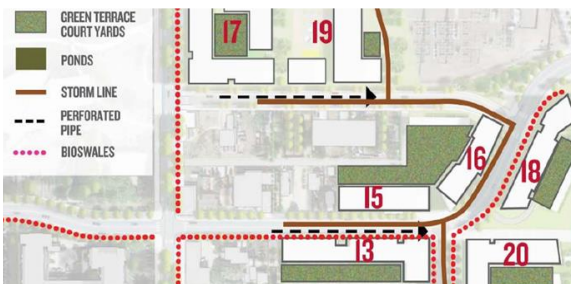
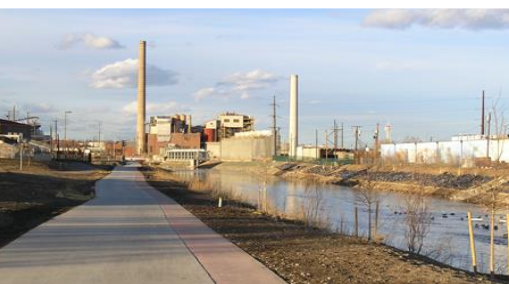


Evaluating Options for Green Infrastructure on a Brownfield

Improving water quality along the South Platte River in Denver, Colorado



Project Summary

Community: Denver, Colorado

Technical Assistance: Green Infrastructure

Former Use: Industrial Neighborhood

Future Use: Mixed-Use Residential Community

The Sun Valley neighborhood in Denver is adjacent to the South Platte River. Historic industrial uses have left a legacy of environmental contamination at sites within the neighborhood, which continue to threaten the health of the people and the ecology of the river. In addition, a significant number of neighborhood residents live in poverty conditions.

In 2010, the city and county of Denver developed a Brownfields Area-Wide Plan to help improve neighborhood conditions along the South Platte River and ultimately enhance public health and community value. The Sun Valley residential redevelopment vision includes a high-density, mixed-income rental and ownership community, as well as mixed-use commercial space. A primary goal is to rebuild the community with features that promote social and environmental sustainability, with the environmental components focusing on stormwater conveyance and treatment.

The Community's Challenge

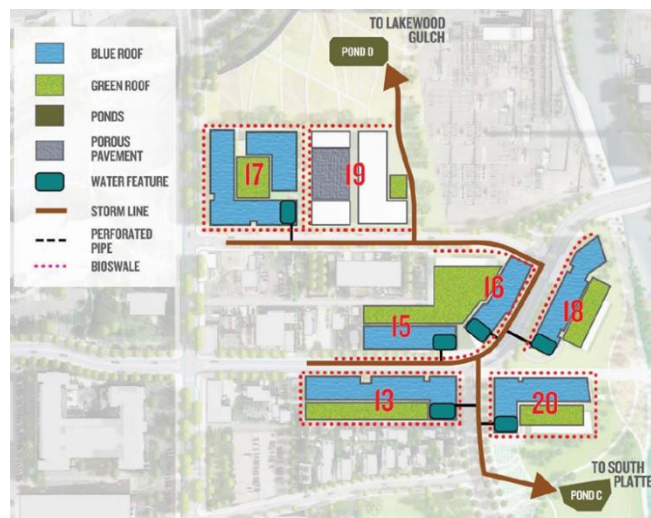
To carry out the area-wide redevelopment plan, the city and county of Denver needed help minimizing contaminant runoff from Sun Valley's brownfield sites, while implementing sustainable environmental solutions.

EPA's Land Revitalization Technical Assistance

EPA's Land Revitalization Program provided contractor assistance to evaluate green stormwater management

approaches that could be incorporated into the Sun Valley redevelopment master plan. The contractor team developed the Conceptual Green Infrastructure and Drainage Options Report, which presents four stormwater design alternatives that incorporate green infrastructure techniques such as bioswales, green roofs, and blue roofs. Each alternative includes a performance assessment, cost estimate, and sustainability ranking to be considered prior to implementation. A comparative analysis verified that green infrastructure was a cost-effective option.

EPA's technical assistance will allow the Sun Valley community to effectively and sustainably manage on-site and off-site stormwater and help reduce contaminant flow into the South Platte River, improving water quality.



Concept Option: On-site detention and water quality: blue roof, green roof, and green streets

For more information, contact Stacey Eriksen, EPA Region 8 Brownfields Program, at Eriksen.Stacey@epa.gov.