

US EPA ARCHIVE DOCUMENT



Low Impact Development Parking Lot for a New Recreation Center

Sustainability Pilot Background

EPA's Brownfields Sustainability Pilots provide technical assistance to assist communities in achieving greener, more sustainable results when redeveloping brownfields. These pilots also provide models for other communities across the country.

EPA provided the City of Laredo with technical assistance for the design of a low impact development (LID) parking lot to service a new recreational center. The center will be located adjacent to a formerly contaminated wetland on Killam Lake. EPA assisted the city in developing conceptual drawings for sustainable stormwater management for the parking lot.



Haynes Recreation Center Background

In 2006, the City of Laredo received a \$100,000 Brownfields Cleanup grant to clean up the 18 acre Killam Lake site which is part of the Chacon Creek Watershed. This site was subject to years of illegal dumping. As a result of the cleanup, the city will reduce the potential for water pollution from the site and help prevent riparian degradation in the Chacon Creek Watershed. In accordance with the Chacon Creek Master Plan, which calls for the preservation of natural land and the creation of recreational opportunities, the city plans to sustainably design and construct the Haynes Recreation Center on property adjacent to a wetland site. The city requested technical assistance through the EPA Sustainability Pilot to design a low impact parking area for the center.

Project Highlights

The city wants to incorporate innovative sustainable stormwater management and sustainable features in the design of the recreational center. EPA assistance included providing conceptual drawings for an alternate parking area to serve both the recreational center and the city's trail system along Chacon Creek. The new parking area design includes stormwater features such as:

- Porous pavers and pervious concrete to allow for stormwater absorption below parking and walking areas
- Bioswales and bioretention swales featuring native plants to absorb stormwater runoff
- Tree locations for additional bioabsorption of stormwater runoff

EPA also provided the city with the tools to adopt sustainable stormwater management principles on other sites in the city. The conceptual drawings include a schematic of the parking area and designs for various stormwater retention technologies. This allows the city to replicate these technologies on other sites.

The city expects to complete construction of the recreation center and the alternate parking area by April 2010.

Challenges and Lessons Learned

Building Local Capacity to Replicate Technologies on Other Sites

The city requested assistance with all the sustainable parking lot components, including alternative building materials, construction debris management, and stormwater management. The technical assistance provided a site specific conceptual design for the LID parking area, schematics of the different technologies recommended, and probable materials cost estimate for the construction of the parking area. These tools were designed to provide the city with replicable approaches for implementing stormwater management principles for parking areas on other sites in the city.

Hanes Recreation Center and Chacon Creek Recreation Area Site Plan.



Sources for Additional Information

For more information on this project, please see the full Laredo technical assistance report at:
http://www.epa.gov/brownfields/sustain_plts/factsheets/laredo.pdf and

Probable Materials Cost Estimate at:
http://www.epa.gov/brownfields/sustain_plts/factsheets/laredo_ci.pdf

Regional Contact Information

For more information on the Laredo Haynes Recreation Center Sustainability Pilot project, please contact:

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