

Westerly Creek Green Infrastructure and Stream Restoration Design

Denver, Colorado

Starting in 2011, EPA's Land Revitalization Program and staff from Region 8 supported a project to design green infrastructure for Westerly Creek, an impacted stream in Denver's East Colfax neighborhood, a community with a largely immigrant population and environmental justice concerns. The stream restoration component was an unfunded component of a larger project between Trust for Public Lands and the City and County of Denver that transformed a vacant lot into a park with recreational facilities and a community garden.

Now complete, New Freedom Park is a new neighborhood amenity for a diverse community with a large refugee population. The stream restoration component was made possible by an Urban Waters Partnership effort that included the City and County of Denver, Urban Drainage and Flood Control District (UDFCD), EPA, the Trust for Public Land (TPL), Westerly Connect, Mercy Housing, Grace Housing, and Earth Force.

To design the stream, EPA and TPL engaged the community through two community meetings that allowed the community to articulate its vision for the park and develop plans to implement this vision. Translators were on hand to assist non-English speaking residents, and the meeting also included a youth involvement component facilitated by Earth Force, a national nonprofit organization that engages youth in community-based environmental projects. Children were able to share their input about how the creek should look and their ideas were an integral part of the community input.

The design that resulted from the charrettes used green infrastructure approaches to improve access, safety, and water quality; decrease bank erosion;



Children assisting in a design charrette. Source: U.S. EPA Region 8

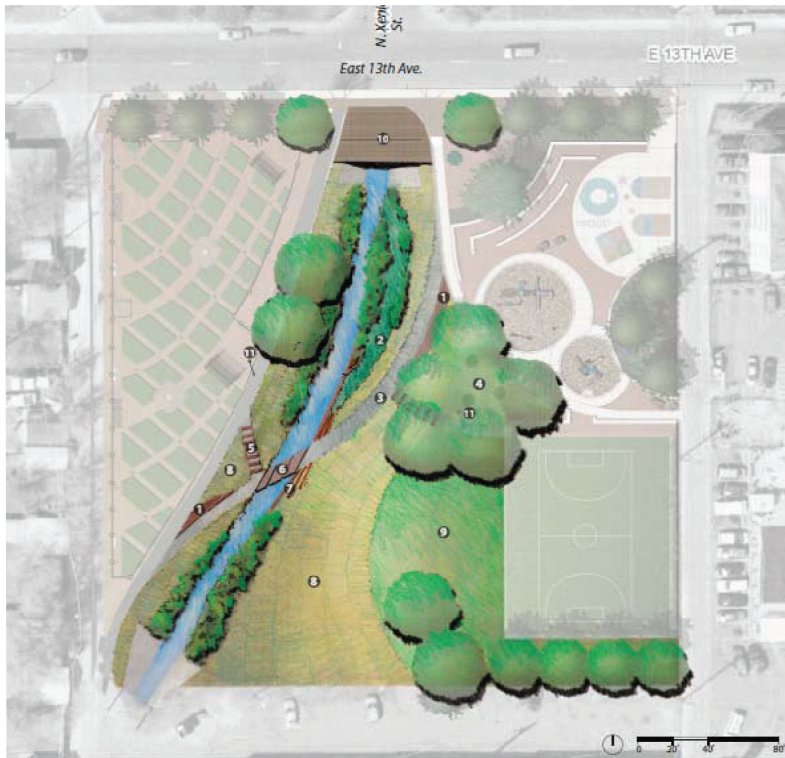
improve aesthetics; meet community needs; and provide wildlife habitat and passive recreation opportunities. The completed park includes a playground, sports field, expanded urban garden, walking trails, new lighting, and access to Westerly Creek, which runs through the parcel. The stream restoration will feature a variety of natural areas of native vegetation, including grassland, wetland, and riparian ecosystems, in addition to recreational greenspace where visitors can picnic.

The green infrastructure design work was funded by EPA's Office of Brownfields and Land Revitalization and by EPA Environmental Justice funds. Design work was completed by Wenk and Associates under an EPA contract with SRA International. EPA's \$50,000 design investment leveraged an additional million dollars in funding: \$500,000 in Natural Resource Damage Assessment (NRDA) funding from Lowry Landfill, \$205,000 in Denver Capital Improvement Funds, and \$295,000 from UDFCD. EPA helped coordinate the application for the NRDA funds.



The design was completed in 2012 and funding for implementation was acquired in 2013. While the original design covered an area less than one block long, Denver will extend the stream restoration to cover almost three blocks. The stream construction will likely begin in the fall of 2015.

This project was a positive experience for EPA, its partners, and the community. Listening to the community's needs improved the design, made it more acceptable to the community, and instilled confidence in the government. The project worked well because all of the partners were brought on in the initial stages.



LEGEND

- ① RETAINING WALL
- ② MARSH WETLAND
- ③ ASPHALT PATH
- ④ PICNIC GROVE
- ⑤ STEPPED RAMP - GARDEN ACCESS
- ⑥ STEPPING STONE CREEK CROSSING
- ⑦ STONE CREEK EDGE
- ⑧ NATIVE GRASS SLOPES
- ⑨ PLAY LAWN
- ⑩ DECK OVERLOOK
- ⑪ PARK LIGHT

Westerly Creek Master Plan. Source: U.S. EPA Region 8

