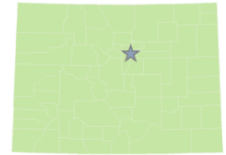


Improving Stormwater Management

DRY GULCH STREAM RESTORATION

LAKWOOD, COLORADO, EPA REGION 8



The Lamar Station Crossing redevelopment project in Lakewood, Colorado, used funding from an EPA Brownfields Assessment grant and a Brownfields Cleanup grant to conduct planning activities and remediate 4,200 cubic yards of contaminated soils in 2012. The Lamar Station Crossing redevelopment project includes property owned by the Metro West Housing Solutions (Metro West) and a portion of the Dry Gulch Stream.

The Dry Gulch channel has steep drop offs at the top of the channel bank and erosion issues. The Gulch also is considered a safety hazard by Metro West. There is debris, low value vegetation and rubbish within the creek, which is aesthetically unattractive and creates potential hazards for flood debris and associated conveyance reduction issues.

EPA's Land Revitalization Team, Metro West Housing Solutions and the Urban Drainage and Flood Control District are working together to address water quality, safety and erosion control concerns associated with the Gulch by designing an approach for stream restoration. Additional project goals are to make the Gulch more ecologically sustainable, connect with a future greenway and to use Dry Gulch as an educational and recreational asset for neighborhood residents and community partners. The project is also part of the South Platte Urban Waters Partnership.

The project team conducted a site visit on March 5, 2014, with the purpose of reviewing existing site channel conditions, identifying areas of channel improvement and establishing restoration concepts. The site visit observations and discussions of site constraints and opportunities identified problem areas along the channel to be addressed through restoration concepts. During the site visit, the project team presented three restoration concepts that ranged from: 1) Channel and Vegetation Maintenance, 2) Partial Channel Stabilization and Vegetation Maintenance and 3) Full Channel Stabilization and Restoration.

The stream restoration design project includes development of restoration concept drawings, initial assessment of channel hydraulics, the recommended plan's concept overview drawing and preparation of a Restoration Concepts and Recommended Plan summary memorandum. The project team and stakeholders selected the Partial Channel Stabilization and Vegetation Maintenance plan approach as the best value in terms of addressing the key project goals while minimizing cost and reducing impacts to healthy sections of the existing stream corridor.

The final deliverable for the stream restoration project includes a package of construction drawings that can be used by Metro West to obtain construction bids to implement the recommended improvements. Prior to developing the construction drawings, Metro West will use the recommended plan concept drawings and details to obtain an initial estimate of construction costs in an effort to reassess the available budget.

For more information, please contact Stacey Eriksen, EPA Region 8, eriksen.stacey@epa.gov.



Figure 11: Removal of in-channel debris, reducing erosion potential, flattening channel bank slopes and vegetation maintenance are key project elements in the Dry Gulch channel restoration design.

NEXT STEPS

- Develop construction drawings, prepare a no-rise floodplain certification and conduct final coordination with stakeholders.