Green Street Demonstration Project on Main Street Infrastructure Program Executive Summary Upper Los Angeles River, City of Alhambra, FY 24-25



Project Background

This Project is a sustainable stormwater streetscape project in the City of Alhambra that will bring multiple benefits to the community.

Project Objectives: The project will beautify Main Street; reduce stormwater runoff volumes and pollutant loads; enhance open space, include native plantings and habitat; and demonstrate to the public the benefits of green infrastructure.

Project Status: Project is requesting funds for Design and Construction phases.

Total Funding Requested: \$ 2,027,000

Project Overview

- The Green Street Demonstration Project on Main Street is in the City of Alhambra on Main Street between Hampden Terrace and North Fremont Avenue, as well as small portions of Grand Avenue and Birch Street north of Main Street.
- The Project is a first of its kind within the City of Alhambra and will provide multiple benefits to the neighborhood and the surrounding environment while also reducing stormwater runoff volumes and pollutant loads to receiving waters.
- The Project will beautify Main Street; reduce stormwater runoff volumes and pollutant loads; enhance open space, include native plantings and habitat; and demonstrate to the public the benefits of green infrastructure.



- Green streets mimic the natural processes of pre-developed landscapes by detaining and slowing flows, filtering
 runoff through soils, and infiltrating captured water into native soils, potentially replenishing natural
 groundwater resources. The Project will implement these treatment mechanisms primarily through the
 installation of two types of stormwater Best Management Practices (BMPs): (1) bioretention and (2) dry wells.
- Currently, the wide center medians consist of lawn and six (6) large heritage trees. Large bioretention facilities
 will be installed in the center median to make use of excess space while preserving the heritage trees. A series of
 smaller bioretention cells will be placed along the southern edge of Main Street next to the sidewalk. A total of
 seven (7) dry wells will be installed in the residential streets north of Main Street.
- BMPs will be implemented within the City right of way.

Green Street Demonstration Project on Main Street Infrastructure Program Executive Summary Upper Los Angeles River, City of Alhambra, FY 24-25





Page 2 of 4

Green Street Demonstration Project on Main Street



Infrastructure Program Executive Summary Upper Los Angeles River, City of Alhambra, FY 24-25

Preliminary Score			
Benefit	Score	Description	
Water Quality	50	 Wet Weather Project Primary mechanisms that achieve Water Quality and Water Supply Benefits claimed: The Project will detain and slow flows, filter runoff through soils, and infiltrate captured water into native soils through the installation of two types of plane and provide Provide Provide (2) (1) biographics (2) (2) (1) biographics (2) (2) (3) (4) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5	
Water Supply	10	 stormwater Best Management Practices (BMPs): (1) bioretention and (2) dry wells. Tributary Area: 38 acres Capacity: The total 24-hour BMP capacity volume is 5.1 acre-feet. Water Quality Cost Effectiveness: 1.01 acre-feet capacity/\$-Million Pollutant Reduction: The Project is estimated to reduce zinc, the primary pollutant in the ULAR EWMP, by 94% annually over the 10-year continuous simulation. The Project is estimated to reduce trash, the secondary pollutant, by 100%. Annual Water Supply Volume: The Project is expected to infiltrate 18.72 acre-feet of stormwater annually, which earns the Project six (6) points under the Water Supply Benefits Alternative Scoring Pilot. Water Supply Use: Because the Project sits on top of a managed and unconfined groundwater basin (Main San Gabriel), infiltrated stormwater is expected to replenish groundwater supplies. Water Supply Cost Effectiveness: Over the 50-year lifespan the Project would provide 936 acre-feet of recharge. Given an annualized life cycle cost of \$243,022, the water supply benefit is \$12,982 per acre-foot, which earns the Project four (4) 	
Community Investment	5	 Through the greening, recreational, and pedestrian enhancements, the Project will achieve: Creation, enhancement, or restoration of parks, habitat, or wetlands Enhanced or new recreational opportunities Reducing local heat island effect and increasing shade Increasing the number of trees increase and/or other vegetation at the site location that will increase carbon reduction/sequestration and improve air quality. 	
Nature Based Solutions	10	 Through the incorporation of bioretention and dry wells, the Project will mimic natural processes to slow, detain, capture, and infiltrate water in a manner that protects, enhances, and restores habitat, green space, and usable open space, earning five (5) points. The Project will also utilize natural materials such as soils and vegetation with a preference for native vegetation, earning an additional five (5) points. 	
Leveraged Funds	6	 The City will leverage an awarded Urban Greening Grant as match for 60% of the total capital costs, which earns the Project six (6) points. 	
Community Support	4	 The Project has strong local, community-based support. Stakeholders participated in the Design Options Workshop and contributed to the development of Project elements. The Project plans to continue engagement with the local community and its members to maintain and further develop support. 	

Green Street Demonstration Project on Main Street

Infrastructure Program Executive Summary Upper Los Angeles River, City of Alhambra, FY 24-25



TOTAL	85	5

Project Cost & Schedule						
Phase	Description	Cost	Completion Date			
Design	Design, geotechnical support, surveying, permit document and fees, project administration and grant reporting (includes a 30% contingency).	\$ 985,000	April 2025			
Construction	Construction costs, construction inspector, construction testing, consultant support for bidding, construction, admin, and closeout, and record drawings (includes a 30% contingency).	\$ 4,047,000	April 2026			
TOTAL		\$5,032,000				

The Project is expected to have a lifespan of 50 years. Annual operation and maintenance (O&M) is expected to cost \$21,000 per year, for a total of \$1,060,000 over the projects lifespan. Annual O&M costs include city staff time, equipment, mulch replacement, trash removal, and truck usage. In addition to annual O&M costs, the project also planned for a 3-year monitoring period, with the possibility of long-term monitoring, to begin when construction is complete. Monitoring costs for the 3-year period total to \$130,000 and include equipment, labor, and lab fees. Considering both the capital costs outlined in the table above as well as the O&M and monitoring costs, the anticipated total life cycle cost for the Project is \$6,222,000.

Funding Request						
Year	SCW Funding Request	Phase	Efforts during Phase and Year			
1	\$ 985,000	Design	Geotechnical studies, project surveying, Design 60%, permitting, Safe Clean Water reporting, project administration			
2	\$ 1,042,000	Construction	Project administration, design 100%, design report, final bid package, final O&M plan, permitting, Storm Water Pollution Prevention Plan (SWPPP), advertising, bidding, and contracting, construct project. Construct project, final inspection and acceptance, Safe Clean Water reporting.			
τοται	\$ 2 027 000					

• The funding requested was calculated as 40% of the total capital costs. No additional SCW funding requests are expected for design or construction. Project applicant may apply for SCW funds for O&M in the future.