UPPER LA RIVER

Round 5 Project Submissions

October 4, 2023

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Round 5 Project Submissions

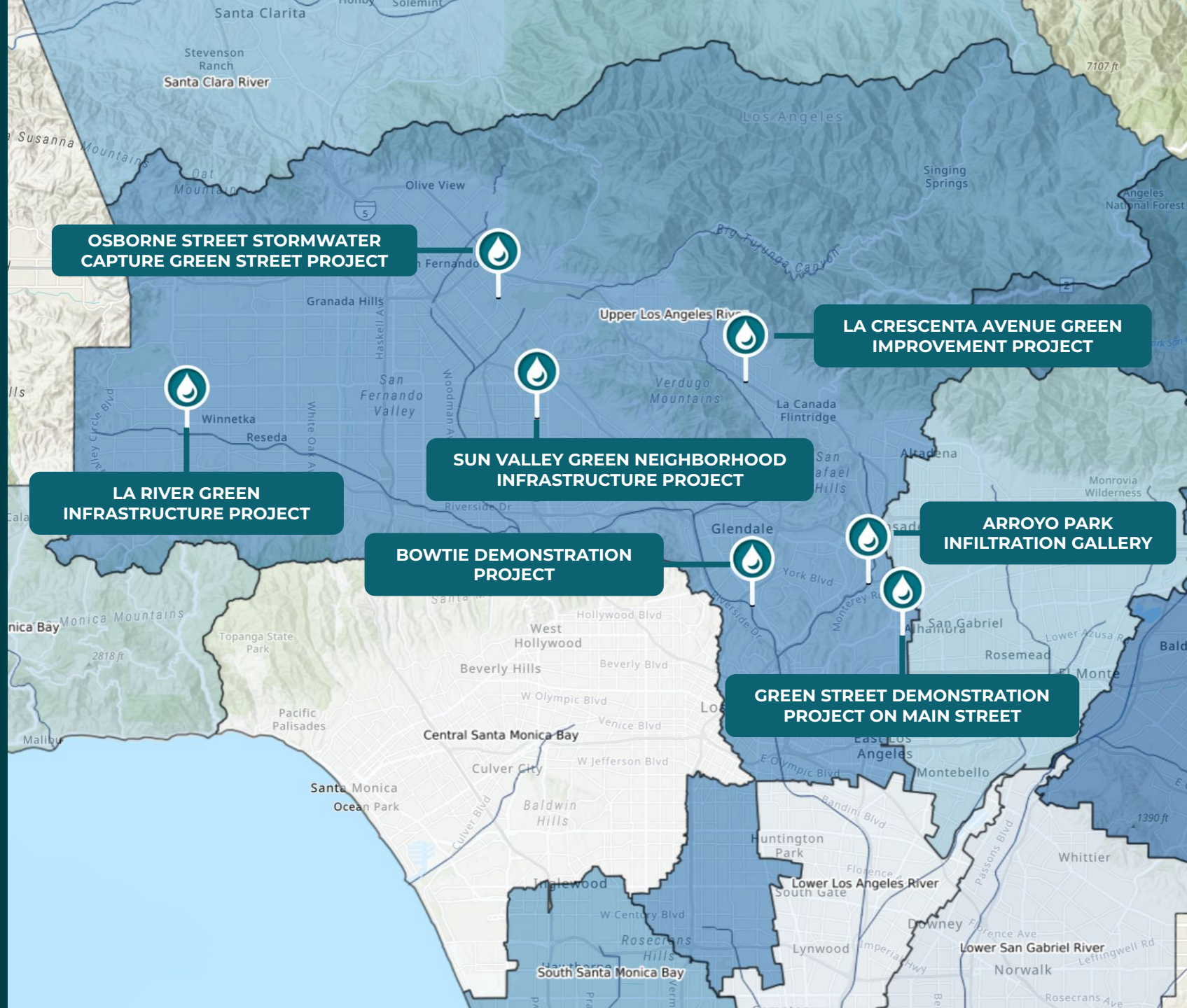
Program	Preliminary Total SCW Funding Requested	Preliminary Projects Submitted
Infrastructure Program (>85%)	~$53M	7
Technical Resources Program (≤10%)	$300K	1
Scientific Studies Program (≤5%)	~$4M	3
TOTAL	**~$58M**	**11**

Infrastructure Program

Project Title	Project Proponent	Funding Amount
LA River Green Infrastructure Project	City of Los Angeles, Department of Public Works, LA Sanitation and Environment (LASAN)	$17,053,812.00
Sun Valley Green Neighborhood Infrastructure Project	City of Los Angeles, Department of Public Works LA Sanitation and Environment (LASAN)	$13,771,475.00
Arroyo Park Infiltration Gallery	City of South Pasadena	$7,160,127.06
Bowtie Demonstration Project	The Nature Conservancy	$1,833,790.00
La Crescenta Avenue Green Improvement Project	County of Los Angeles	$2,000,000.00
Osborne Street Stormwater Capture Green Street Project	City of Los Angeles Bureau of Street Services (StreetsLA)	$9,500,000.00
Green Street Demonstration Project on Main Street	City of Alhambra	$2,027,000.00
Total Request		**$53,346,204.06**

Round 4 Project Submissions:

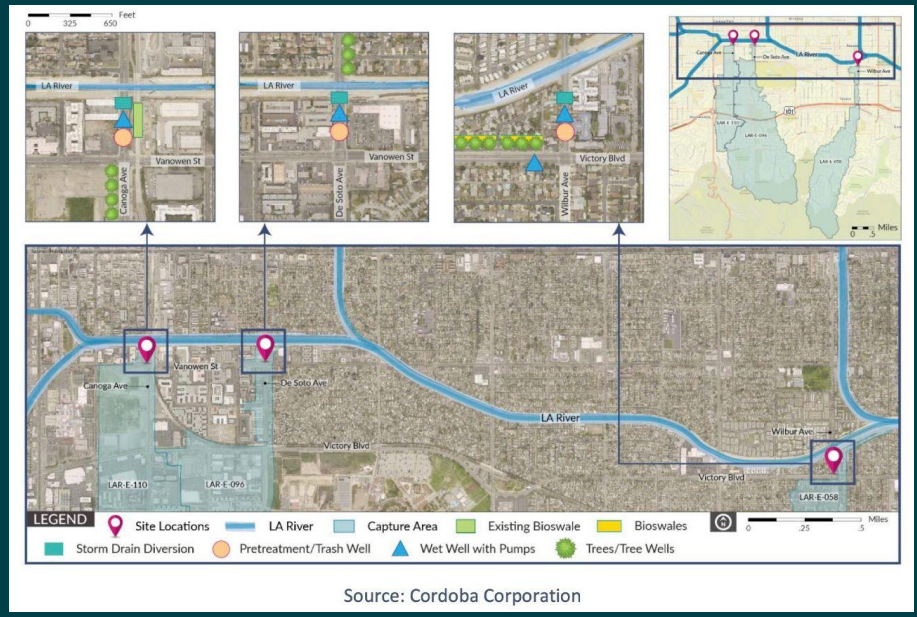
Infrastructure Program



LA River Green Infrastructure Project

Estimated Module Score: 70

Lead, Location, Timeline:	• Lead: City of Los Angeles, Department of Public Works, LA Sanitation and Environment (LASAN) • Location: 21401 W. Vanowen St. Los Angeles, CA 91303 • Timeline: Planning – 04/2024; Design – 06/2024; Construction – 10/2025; Post-Construction Design - 06/2029
Total Request:	• $17,053,812.00 • Year 1 funding request: $938,214.00 • Leveraged municipal funds: $3,167,388.00
Benefits Include:	• Capture and treat dry weather runoff before it reaches the LA River. Bioswales and trees along access routes to the LA River improve public's access to LA River recreation areas. • Additional shade, improved air quality, and a reduction in the Heat Island Effect. • Features: Bioswales, Tree Wells, dry weather diversion systems (210.3 acre-feet of runoff per year) to increase water supply to the Donald C. Tillman Water Reclamation Plant.
Claimed Disadvantaged Community Benefits:	• Yes, the Project is located within and adjacent to multiple disadvantaged communities. • The Project will directly benefit disadvantaged communities by adding greener spaces to local streets. The addition of trees and greening will create additional shade, improved air quality, and a reduction in the Heat Island Effect.
Community Support:	• Letters of support from Councilmember Blumenfield, Hart Street Elementary School, Los Angeles Department of Water and Power, Los Angeles River Walkers and Watchers, Tree People, and Winnetka Neighborhood Council.



Source: Cordoba Corporation

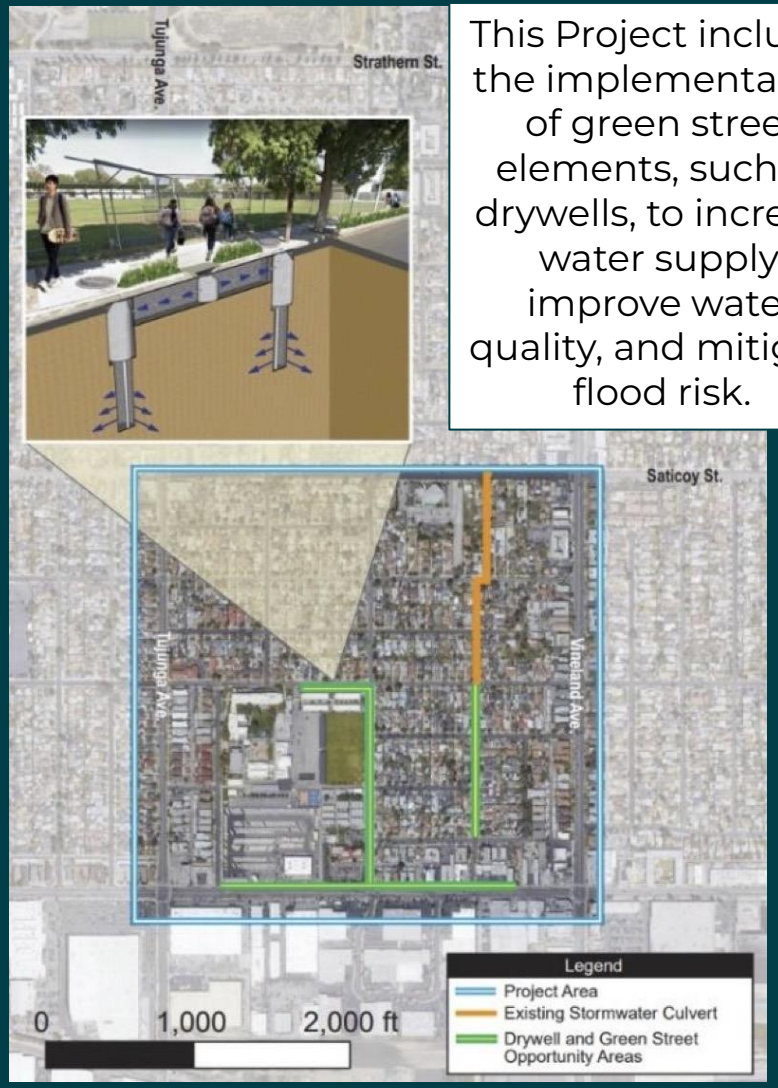
The Project will install dry weather diversions to remove pollutants from runoff, improve water quality, and increase water supply.

Round 3 returning project previously not funded

Sun Valley Green Neighborhood Infrastructure Project

Estimated Module Score: 86
Water Supply Score (Pilot): 9
Water Supply Benefit Magnitude (Pilot): 9

Lead, Location, Timeline:	• Lead: City of Los Angeles, Department of Public Works LA Sanitation and Environment (LASAN) • Location: Valerio St and Case Ave, Sun Valley, CA 91352 • Timeline: Planning – 12/2024; Design – 12/2026; Construction –12/2028; Post-Construction Design - 12/2029
Total Request:	• Total: $13,771,475.00 • Year 1 funding requested: $763,363.00 • Leveraged municipal funds: $2,599,140.00
Benefits Include:	• Improve local water quality by reducing pollutants in runoff from the project watershed; improved flood risk mitigation by reducing surface runoff during storm events; increase water supply by directing surface runoff into the groundwater; and beautify the neighborhood with California-native and drought- resistant vegetation. • The project features 40 dry wells and 2,000 sf of bioswales, and benefits such as enhanced habitat, enhanced recreational opportunities, greening of schools, reduced heat island effect, and increased shade with 35 additional trees.
Claimed Disadvantaged Community Benefits:	• Yes, the Project is located within the Sun Valley neighborhood which is an area designated as a DAC by the CalEnviroScreen Tool. • The Project would benefit the disadvantaged community by improving water quality and providing educational opportunities for members of the community to learn about stormwater and water resources.
Community Support:	• Letters of Support from the Sun Valley Area Neighborhood Council, 17 from community members at both LASAN Open House Event and Earth Day Event, TreePeople, and the Theodore Payne Foundation.



This Project includes the implementation of green street elements, such as drywells, to increase water supply, improve water quality, and mitigate flood risk.

Osborne Street Stormwater Capture Green Street Project

Estimated Module Score: 90
Water Supply Score (Pilot): 6
Water Supply Benefit Magnitude (Pilot): 6

Lead, Location, Timeline:	• Lead: City of Los Angeles Bureau of Street Services (StreetsLA) • Location: Osborne Street (between Foothill Boulevard and San Fernando Road), Los Angeles, CA 91331 • Timeline: Planning – 06/2025; Design – 06/2026; Construction – 06/2028
Total Request:	• Total: $9,500,000.00 • Year 1 funding requested: $150,000.00 • Caltrans grant award: $4,877,400.00 • Leveraged municipal funds: $2,827,600.00
Benefits Include:	• Stormwater improvements proposed include drywells to fully capture the water quality design storm and increase the water supply benefits through recharge to the underlying San Fernando Valley Groundwater Basin. • Geen biofiltration features, such as bioswales and rain gardens, reduce impervious surfaces and provide additional water quality benefits.
Claimed Disadvantaged Community Benefits:	• Yes, the Project is adjacent to seven DAC Census Block Groups per the Safe Clean Water Program Spatial Data Library. • New protected bike lanes and sidewalks will increase cyclist and pedestrian safety and encourage more active transportation. • The addition of green space and trees throughout the corridor will reduce local urban heat island effect and provide physical and mental health benefits.
Community Support:	• Letters of support from Pacoima Beautiful, Champions in Service, and the Foothill Area Community Relations Office, Monica Rodriguez, City Councilwoman (CD 7), Luz Rivas, Assemblywoman (43rd District), Metro, El Nido Family Centers, Tony Cardenas, Congressman (29th District), Caroline Menjivar, California Senate, and the Fernandeño Tataviam Band of Mission Indians..

Regional stormwater capture and infiltration located along a 1.7-mile stretch of Osborne Street to enhance active transportation improvements.

Bowtie Demonstration Project

Estimated Module Score: 62

Lead, Location, Timeline:	• Lead: The Nature Conservancy. Additional Project Collaborators: California Department of Parks and Recreation. • Location: 2780 W Casitas Ave, Los Angeles, CA 90039 • Timeline: Planning – 04/2022; Design – 09/2023; Construction – 12/2025
Total Request:	• Total: $1,833,790.00 • Year 1 funding requested: $376,402.00 • Cost share from The Nature Conservancy: $844,307.00 • Request is for O&M only
Benefits Include:	• A constructed wetland will allow for natural processes of sedimentation and filtering to treat dry-weather flows further after the pre-treatment system. • The addition of park space, including trails, vegetation, boardwalks, and educational signage.
Claimed Disadvantaged Community Benefits:	• Yes, the Project lies 400 feet southeast of a severely disadvantaged community census tract. • Increased native vegetation and tree coverage in the area will reduce local heat island effects and provide improved public access to open space. • Water quality and community investment benefits by treating stormwater that is currently contributing to pollution in the LA River. • Creation of a wetland with improved public access to waterways and recreational opportunities to residents in the nearby neighborhoods. The wetland area will include various trails for monitoring and programming, as well as boardwalks and viewing platforms.
Community Support:	• Letter of support from California State Parks and Recreation.

The Project is a multi-benefit stormwater management and habitat enhancement demonstration project along the LA River.

Round 4 returning project previously not funded

Arroyo Park Infiltration Gallery*

Estimated Module Score: 74
Water Supply Score (Pilot): 6
Water Supply Benefit Magnitude (Pilot): 5

Lead, Location, Timeline:	• Lead: City of South Pasadena • Location: 614 Stoney Drive, South Pasadena, CA 91030 • Timeline: Planning – 12/2025; Design – 12/2025; Construction – 07/2028
Total Request:	• Total: $7,160,127.06 • Year 1 funding requested: $934,073.82 • Cost share agreement from Caltrans: $3,114,685.00
Benefits Include:	• Capturing stormwater runoff and dry weather flows to provide treatment and/or groundwater recharge along the Arroyo Seco through the use of an underground infiltration system. • Enhancements to the park include field enhancements to the soccer fields, walking paths, educational signage, and native vegetation.
Claimed Disadvantaged Community Benefits:	• Yes, the DAC are situated in adjacent neighborhoods close to the project sites. • This Project will provide water quality benefits through the pretreatment and infiltration systems to remove solids, trash and nutrients from water discharging into the AS Channel. • The Project will improve park space adjacent to the Arroyo Seco Channel. There will be an establishment of gathering spaces and rest areas with native vegetation and trees.
Community Support:	• Letters of support from Active SGV, South Pasadena Little League, American Youth Soccer Organization, Caltrans, and the City of Pasadena.

Project proposes an underground infiltration gallery (NDS StormChamber) to be located underneath a soccer field at Arroyo Park

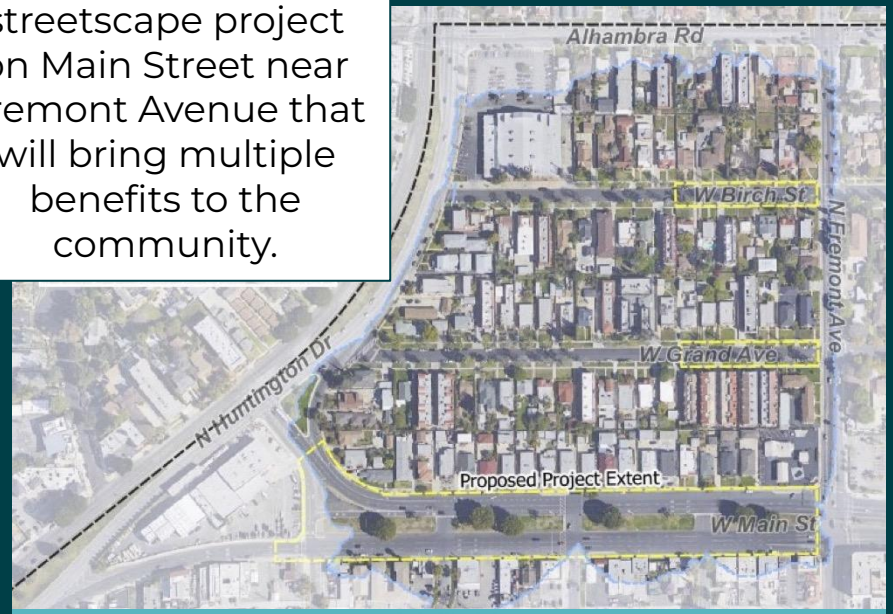
TRP returning project.
(* IP Application might be different than submitted TRP).

Green Street Demonstration Project on Main Street *

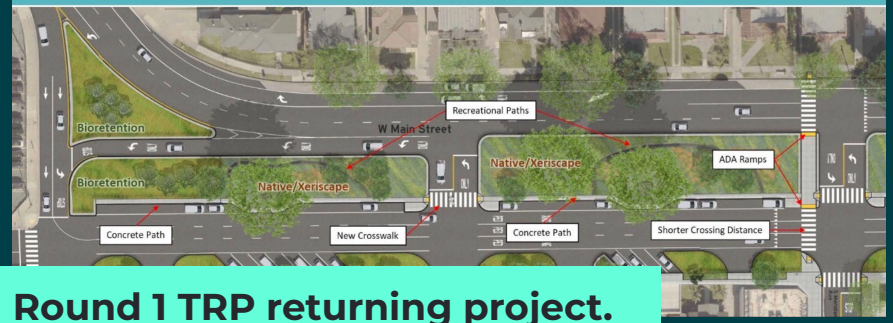
Estimated Module Score: 85
Water Supply Score (Pilot): 6
Water Supply Benefit Magnitude (Pilot): 4

Lead, Location, Timeline:	• Lead: City of Alhambra • Location: 2799 W Main St, Alhambra, CA 91801 • Timeline: Planning – 07/2022; Design – 04/2025; Construction – 04/2026
Total Request:	• Total: $2,027,000.00 • Year 1 funding requested: $985,000.00 • Urban Greening Grant from California Natural Resources Agency: $3,005,040.00
Benefits Include:	• Bioretention facilities will capture, absorb, and infiltrate runoff thereby reducing pollutant loads to the receiving waters and improving environmental water quality. • Examples of community benefits provided include increased shade, trees, and natural vegetation, improved pedestrian crossings, new recreational space and pathways, educational signage, preservation of heritage trees, and no loss in parking space.
Claimed Disadvantaged Community Benefits:	• N/A
Community Support:	• Letters of support from ActiveSGV, Asian Pacific Islander Forward Movement, and Smart Timer Rebate.

A sustainable stormwater streetscape project on Main Street near Fremont Avenue that will bring multiple benefits to the community.



Project Details



Round 1 TRP returning project.
Round 4 previously not funded.
(* IP Application might be different than submitted TRP).

La Crescenta Avenue Green Improvement Project

Estimated Module Score: 70

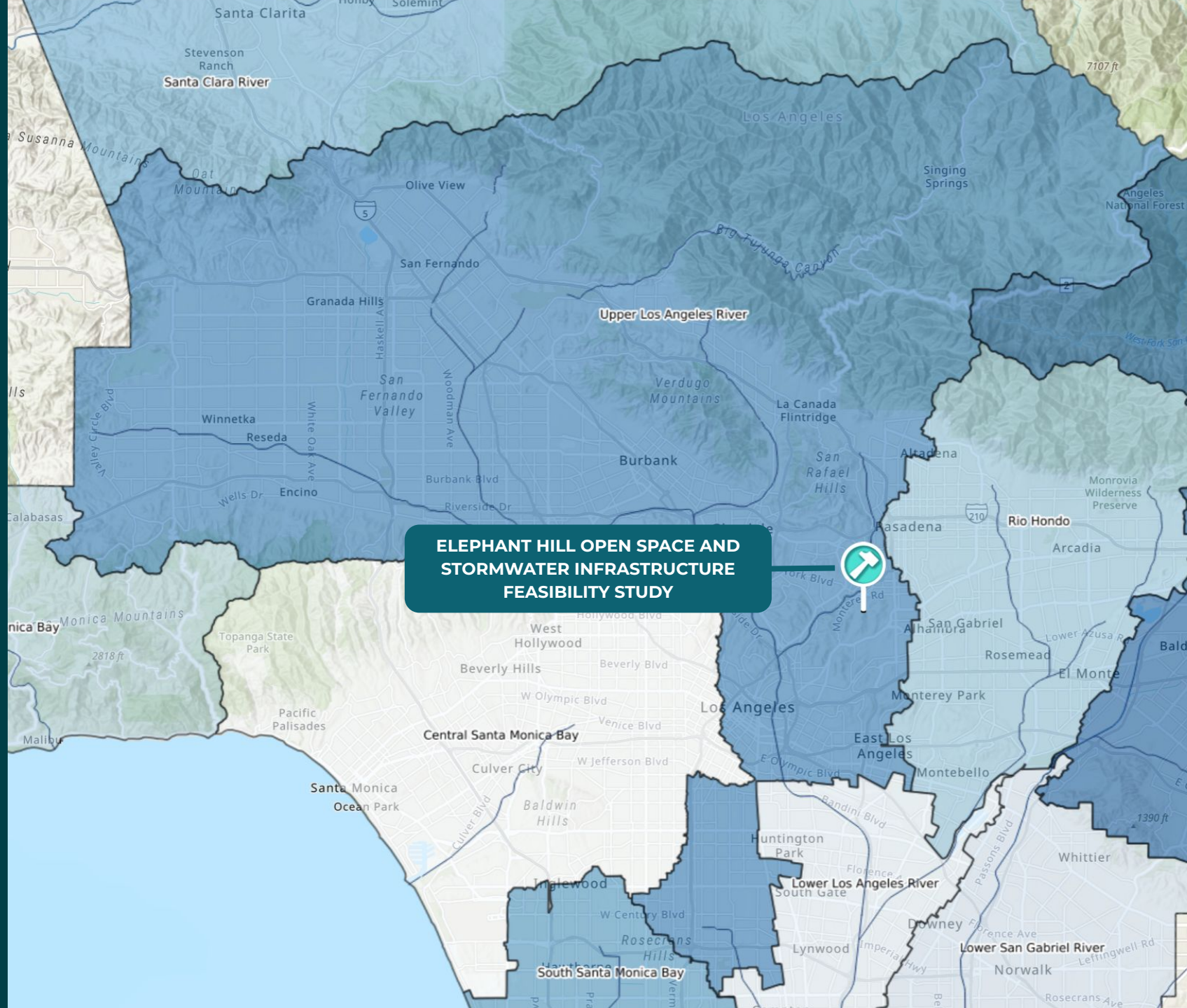
Lead, Location, Timeline:	• Lead: County of Los Angeles. Additional Project Collaborators: City of Glendale • Location: 4343 La Crescenta Avenue, La Crescenta-Montrose, CA 91214 • Timeline: Planning – 05/2023; Design – 04/2025 ; Construction – 12/2026
Total Request:	• Total: $2,000,000.00 • Year 1 funding requested: $500,000.00 • Leveraged municipal funds: $4,750.688.00 • Prop 1 IRWMP grant award: $1,000,000.00
Benefits Include:	• The project will divert dry weather and stormwater surface runoff into a series of infiltration dry wells located within the roadway at two locations in the unincorporated neighborhoods of La Crescenta and Montrose. • The project will also include above-ground improvements such as newly proposed trees, bioswales, and ADA access points. • Nature-mimicking solutions in the form of above-ground improvements such as 47 newly proposed trees and approximately 15,000 sf of bioswales.
Claimed Disadvantaged Community Benefits:	• N/A
Community Support:	• Letters of support from Crescenta Valley Town Council and TreePeople.

The Project will divert & capture stormwater runoff through the implementation of best management practices (BMPs) within the road right of way.

Round 3 returning project previously not funded

Round 5 Project Submissions:

Technical Resources Program



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Infrastructure Program (>85%)	~$36M	7
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Scientific Studies Program (≤5%)	~$4M	3
TOTAL	**~$40M**	**11**

Technical Resources Program

Project Title	Project Proponent	Funding amount
Elephant Hill Open Space and Stormwater Infrastructure Feasibility Study	Save Elephant Hill	$300,000.00
Total Request		**$300,000.00**

Elephant Hill Open Space and Stormwater Infrastructure Feasibility Study

Lead, Location, Timeline:	• Lead: Save Elephant Hill. Additional Project Collaborators: Mountains Recreation and Conservation Authority (MRCA), City of Los Angeles • Location: 1076-1198 Pullman St, Los Angeles, CA 90032 • Timeline: Project Completion – 08/2025
Total Request:	• Total: $300,000.00
Benefits Include:	• The project holds promising opportunities to prioritize nature based solutions and implement water quality, water supply, and community benefits, by adding native gardens and trees, bioswales and rain gardens, water storage tanks and storm drain inlet filters as well as enhancing trails, benches, drinking fountains and interpretive signage.
Claimed Disadvantaged Community Benefits:	• The project will substantially improve the habitat located between two east-west ridges and restore an underground stream which runs eastward and pools in an intermittent spring. • Stormwater capture will trap pollutants, including bacteria, metals, toxics and trash, preventing their discharge over a network of neighborhoods and streets, and into the Los Angeles River. • This project will enhance open space by adding native gardens, native trees, enhancing trails, benches, drinking fountains and interpretive signage. 144 native trees, 77 bioswales and 63 native plant rain gardens will slow down, retain, and absorb water for onsite reuse.
Community Support:	• Yes, Elephant Hill is surrounded to the east, south and west by Disadvantaged Communities, as defined by CES 4.0. • Planting trees and native plants at the hillside will provide community members with the desired recreational space and will help slow down, spread, filter and retain runoff, and prevent communities at the bottom of the hill from flooding. • This project could serve as a site to educate the public about stormwater issues and best management practices in action.

Prioritize nature based solutions, protect a natural spring, improve water quality and enhance open space for community benefit.

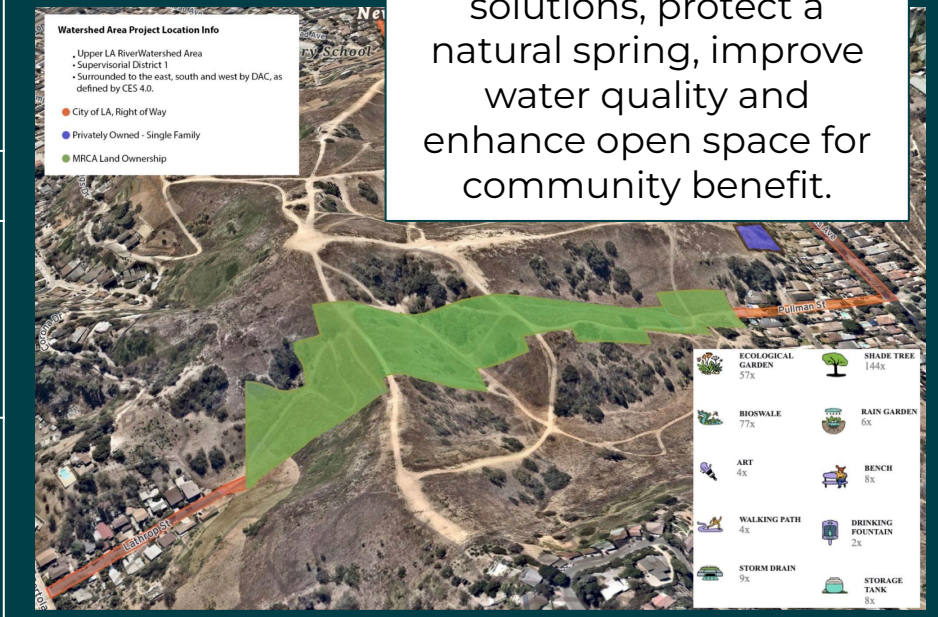
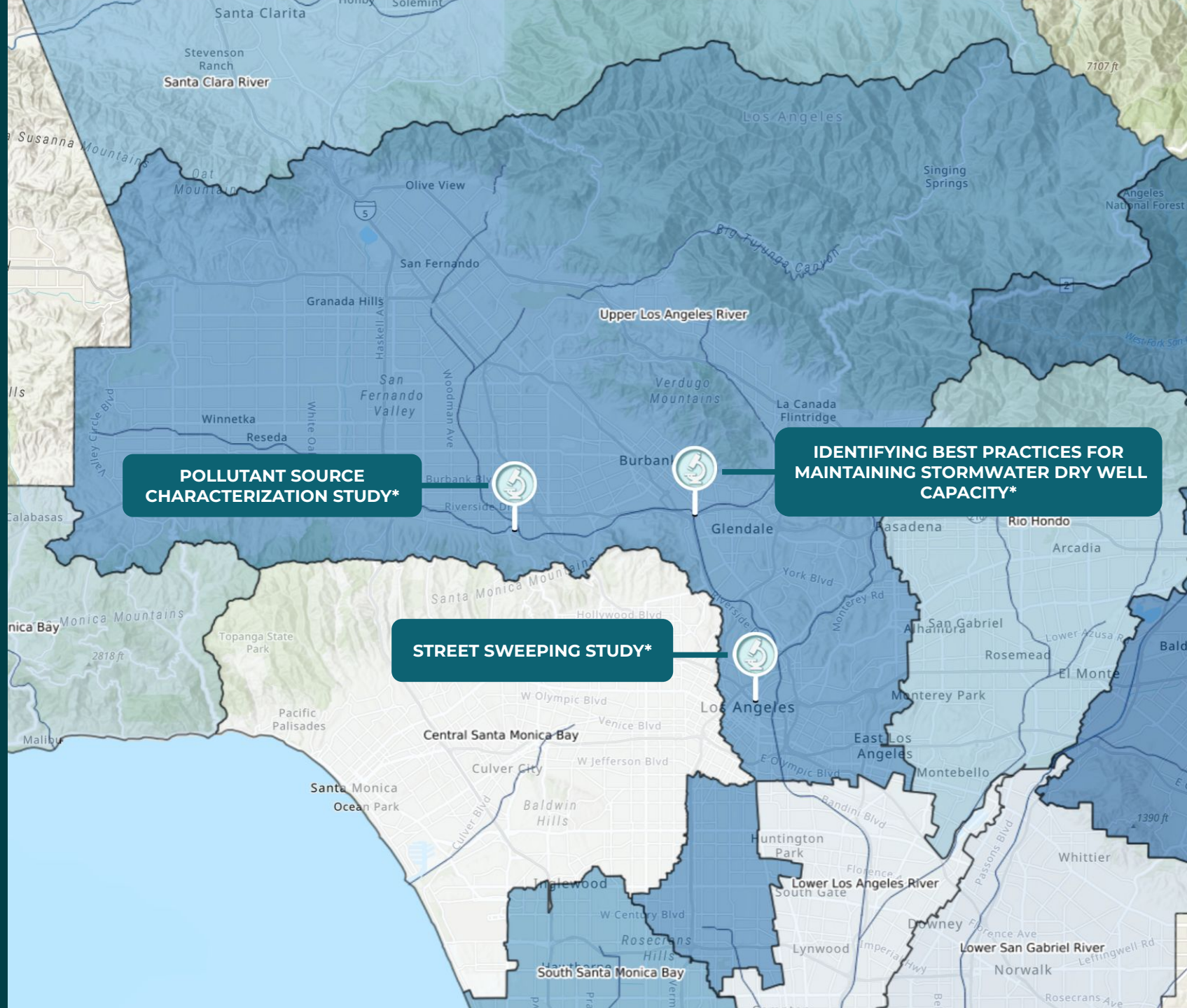


Figure 1: Site images depicting three natural drainages

Round 5 Project Submissions:

Scientific Studies

*Regional Scientific Studies



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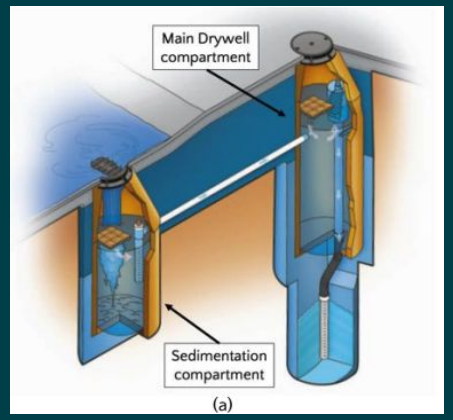
Scientific Studies

Project Title	Project Proponent	Funding amount
Identifying Best Practices for Maintaining Stormwater Dry Well Capacity	California State Polytechnic University, Pomona	$1,067,178.00
Street Sweeping Study	City of Los Angeles	$688,350.00
Pollutant Source Characterization Study	City of Los Angeles	$2,471,000.00
Total Request		**$4,226,528.00**

Identifying Best Practices for Maintaining Stormwater Dry Well Capacity

Lead, Location, Timeline:	• Lead: California State Polytechnic University, Pomona. Additional Project Collaborators: University of California Santa Barbara, Hydrology Laboratory, Kindred Hydro, Inc, Groundswell Technologies, LLC. • Location: 5 drywells in the Upper Los Angeles River Watershed – TBD • Timeline: Study Completion - 06/2029
Total Request:	• Total: $4,951,453.00 (ULAR contribution: $1,067,178.00) • Year 1 funding request: $968,867.00 (ULAR contribution: $208,972.00)
Project Description:	• This study will research drywell design and construction, pre-treatment methods, maintenance practices, land-use and traffic volumes, infiltration capacity over time, and provide recommendations for drywell design, appropriate levels of pre-treatment, and maintenance practices and frequency. • All watersheds included
Benefits Include:	• This study's recommendations for drywell design, pre-treatment design, and maintenance practices will not only optimize the return on investment from stormwater infrastructure but also contribute to the long-term performance, sustainability, and resilience of drywell systems. • Through extensive engagement and collaboration with stakeholders, this project aims to foster knowledge exchange and create a network of practitioners dedicated to implementing best practices. • Simultaneously, the project will empower and train a new generation of engineers, promoting diversity and ensuring a skilled workforce for the future of stormwater engineering in the Los Angeles region and beyond.
Study Objectives:	• Evaluate commonly used drywell design and construction methods and determine which methods provide the best balance between cost and long-term performance • Evaluate common pre-treatment practices and determine which methods provide the best balance between cost and long-term performance, including maintenance requirements; • Evaluate maintenance practices and frequency for different levels of land-use and traffic loading within the catchment basin and develop guidelines for maintenance based on land- use and traffic loading; and • Determine how soil characteristics can impact long-term drywell performance and provide recommendations for design and maintenance to address fine-grained soils.



Evaluation of alternative well designs, existing pre-treatment practices, maintenance intervals for maintaining stormwater drywell capacity.

Fig. 1. Drywell system (a). Typical Torrents Maxwell plus® drywell system with sedimentation compartment, (b). Field installation of a drywell

Street Sweeping Study

Lead, Location, Timeline:	• Lead: City of Los Angeles • Location: Various locations across the City – TBD • Timeline: Study Completion - 09/2027
Total Request:	• Total: $975,000.00 (ULAR contribution: $688,350.00) • Year 1 funding requested: $320,000.00 (ULAR contribution:$282,400.00) • Leveraged municipal funds: $105,000.00
Project Description:	• The Street Sweeping Study (Study) will collect information that will allow the City to consider pollutant removal and water quality alongside more traditional street sweeping concerns when evaluating where, when, and how street sweeping should be conducted. • Watersheds include: Upper LA River, Central Santa Monica, and South Santa Monica
Benefits Include:	• The data collected by the Study will help identify and support enhancements to the City's street sweeping program that would reduce pollutant loads on City streets, thereby improving downstream water quality. • While the Study is primarily focused on removing pollutants from street surfaces with the goal of improving downstream water quality, enhanced pollutant removal can also support other benefits such as improved air quality. • Street sweeping enhancements based on study results could include utilization of sweeping technologies that are more effective for street dirt and pollutant removal, addition of new routes or increased sweeping frequencies in areas of high pollutant loading, and increased prioritization of pollutant removal and water quality during critical time periods (e.g., immediately before storms).
Study Objectives:	• The Study's primary objective is to collect information that will help identify and support potential enhancements to the City's street sweeping program that could provide greater pollutant removal and improve downstream water quality. This objective will be attained by answering the following three questions, with respect to pollutant removal and water quality: 1. How to Sweep? 2. Where to Sweep? 3. When to Sweep?

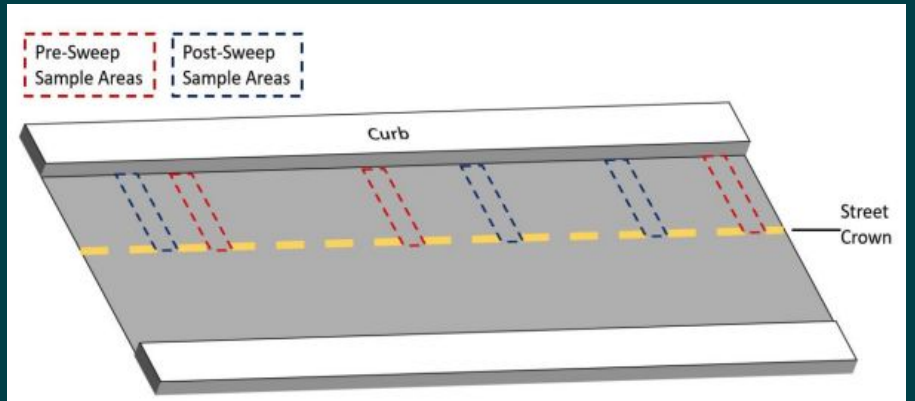


Figure 1-1. Diagram of Sampling Design for Evaluating Real Street Pickup Efficiencies Using Pre- and Post-Sweeping Samples

Study will collect information in order to identify enhancements to the City's street sweeping program that would improve water quality.

Pollutant Source Characterization Study

Lead, Location, Timeline:	• Lead: City of Los Angeles • Location: Various locations across the City – TBD • Timeline: Study Completion - 09/2029
Total Request:	• Total: $3,500,000.00 (ULAR contribution: $2,471,000.00) • Year 1 funding requested: $140,000.00 (ULAR contribution: $98,840.00)
Project Description:	• The Study will update the land use runoff characterization dataset that was used to calibrate WMMS 2.0 over 20 years ago. To further improve understanding of pollutant sources and their representation in water quality models, data will also be collected to characterize runoff from specific HRUs. The Study will also collect data to characterize the material accumulating on surfaces throughout LA County. • Watersheds include: Upper LA River, Central Santa Monica, and South Santa Monica
Benefits Include:	• The data will be used to improve the accuracy and precision of the modeling tools that drive BMP implementation and other efforts to improve water quality in LA County. • The data generated by the Study will also support implementation of all aspects of stormwater programs, including non-structural approaches like source control, by municipalities as well as non-municipal stormwater permittees. • The Study is intended to provide an opportunity for development of the LA Region's water and environment workforce.
Study Objectives:	• The Study's primary objectives are to improve the understanding of pollutant sources and inform more effective implementation of structural and source control BMPs. These objectives will be attained through collection of the following data: 1. Updated runoff data representing drainage areas dominated by a specific land use (e.g., residential, industrial, commercial) 2. New runoff data characterizing specific hydrologic response units (HRUs), consistent with the spatial precision of existing modeling tools. 3. Targeted data characterizing the material accumulating on the surface of select HRUs. 4. The Study is also designed to support workforce development by engaging students and other interested community members in the data collection effort.

Study will collect data to better understand pollutant sources, improve water quality model configuration, and support BMP planning.

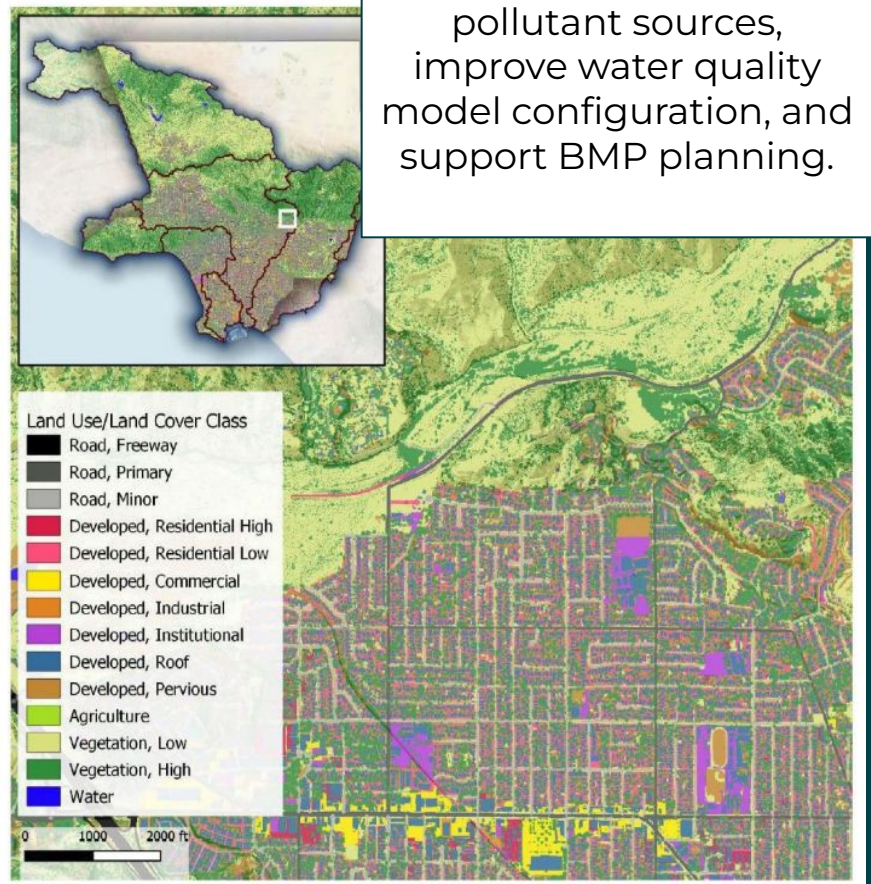


Figure 4-1. Example Raster Presenting the Land Use / Land Cover Classes that Serve as the Basis for HRU Classification

Source: Paradigm Environmental, 2020, WMMS 2.0 Phase I Report: Baseline Hydrology and Water Quality Model. Prepared for LA County Flood Control District