SAFE CLEAN WATER PROGRAM

INFRASTRUCTURE PROGRAM
FISCAL YEAR 2026-2027

Sierra Madre Boulevard Median Enhancement Project

RIO HONDO WATERSHED AREA

APPLICATION TYPE:
CONSTRUCTION, O&M

PRESENTATION DATE:

January 20, 2026

PROJECT LEAD:

City of Pasadena

Project Overview

Stormwater quality treatment and enhanced urban greening to Sierra Madre Blvd. medians

Project Objectives

- **Improve water quality in Eaton Wash by capturing stormwater and dry weather runoff**
  - Expected to infiltrate 100% of dry weather flows from the Sierra Madre Villa Channel and New York Drains
  - Proposes to capture and treat the 85th percentile, 24-hour storm runoff from half of the east and westbound lanes of traffic
- **Streetscape enhancements by expanding vegetation within medians**
  - Approximately 473 new trees and protection of 113 existing trees
  - Improves aesthetics, reduces urban heat effect, supports healthy soils, and anticipated to sequester approximately 37,380 lbs of CO2/year.
- **Create wildlife habitat through nature-based features like bioretention areas and native plants**
  - Introduces 292,290 ft^2 of shrub coverage and 275,214 ft^2 of tree canopy
- **Provide educational opportunities on water conservation, green infrastructure, and local ecosystems**
  - 4 educational community outreach events

PROJECT LEAD

City of Pasadena

SCORING COMMITTEE SCORE

62

PROJECT STATUS

Design

TOTAL FUNDING REQUESTED

$12,481,400

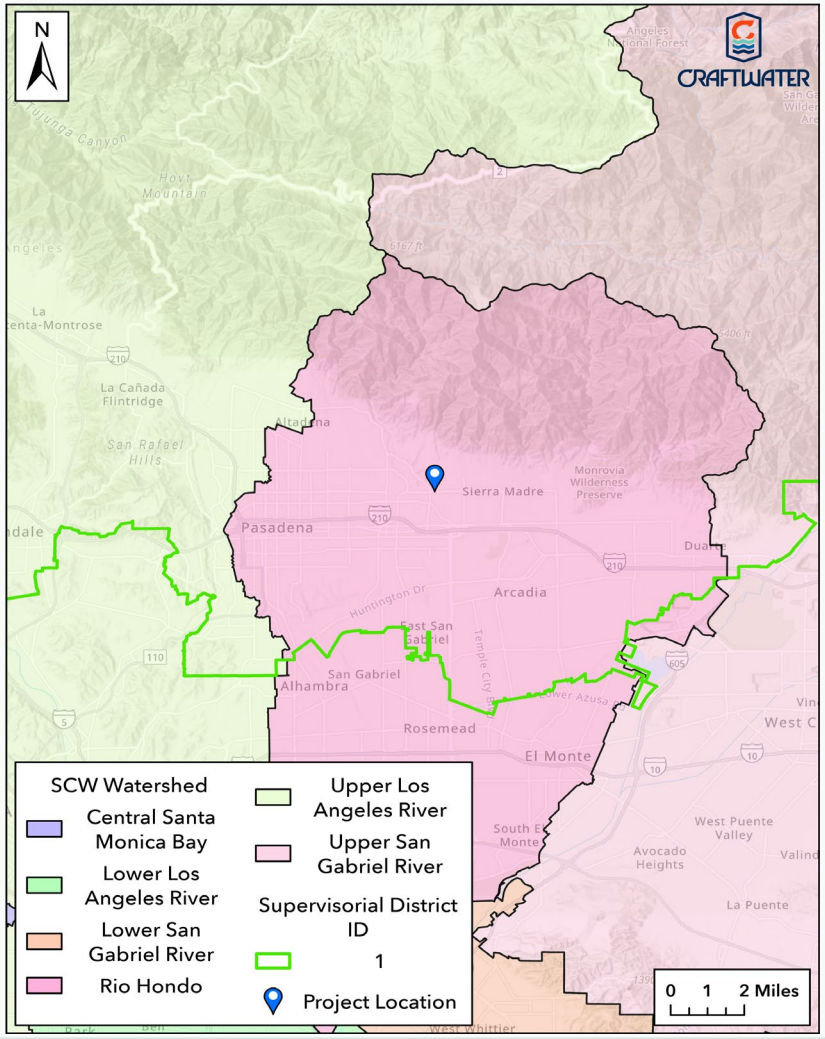
Funding Request Phase(s): Construction, O & M

Previously Awarded Technical Resources Project Concept: Yes

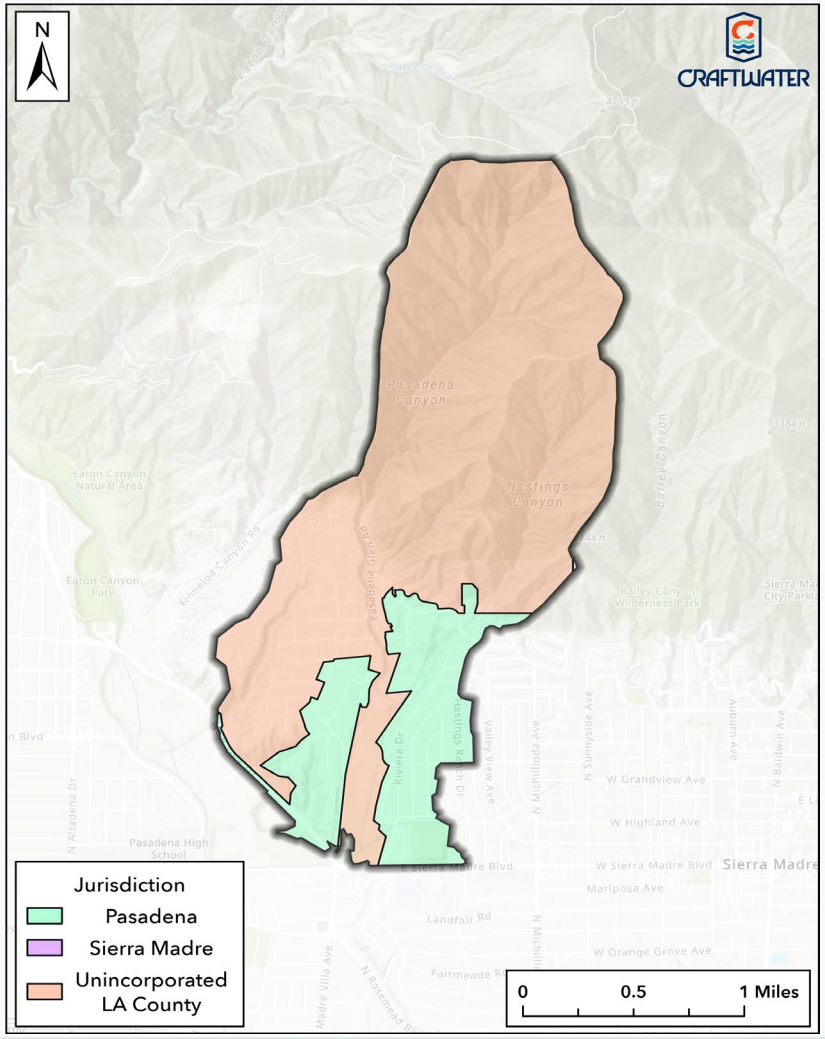
Previously Awarded Instructure Program Project: No

Status: 100% Design Plans Completed

Project Location



Capture Area - Regional



Rio Hondo Watershed

City of Pasadena ROW

Municipalities (1,489 acres)

- Pasadena
- Sierra Madre
- Unincorporated LA County

Local Drainage (7.8 acres)

- Land Uses (City of Pasadena Jurisdiction):
  - Primary Road
  - Secondary Road
  - Urban Open Space
  - Open Space

Project Background

Why was the Project location selected?

- Grass roots effort by community to enhance the historic Pacific Rail Car lines and beautify the area.
- Progress towards MS4 Permit requirements of reducing pollutant load reductions in the Los Angeles River Watershed
- Urban greening opportunity to transform underutilized available open space

How was the Project developed?

- Developed through community-driven outreach and engagement with Councilmember directing the initial project concept
- The proposed dry well system captures and treats dry weather regional flows diverted from both the Sierra Madre Villa Channel and the New York Drain
- Captures and treats roadway surface runoff through infiltration and biofiltration basins located within the median

How will the Project provide regional benefits to the Watershed Area?

- Designed to divert 100% of dry weather flows—with a diversion capacity of 0.145 cfs—into a dry well system
- Wet-weather treatment of 7.8 acres of roadway along Sierra Madre Blvd

How will the Project provide Disadvantaged Community (DAC) Benefits, if any?

- This project does not claim any DAC benefits

Partners

Who are the Project collaborators?

This project does not involve additional project collaborators.

What communities or groups have expressed support for the Project via letters of support?

There have been several community organizations that have committed their support of the project. These organizations include:

City of Pasadena – Mayor, Victor M. Gordo	5th Supervisorial District of LA County- Supervisor Kathryn Barger
City of Pasadena District 4 – Council Member Gene Masuda	Pasadena Department of Public Works
Caltrans	Upper Hastings Ranch Association

For non-municipality, has the Project received a letter of support or non-objection from the Municipality?

The Sierra Madre Boulevard Median Enhancement Project is led by the City of Pasadena.

If requesting construction and/or O&M funds, who is the responsible party in charge of operations and maintenance?

The responsible party for the O&M of this project will be the City of Pasadena. A letter of commitment from the City has been obtained.

Partners

If applicable, has the Project received a letter of conceptual approval from the Flood Control District?

- City of Pasadena is currently in the process of obtaining a permit for the improvements and a Use and Maintenance Agreement with LACFCD
  - Submitted a Flood Construction Permit to the County of Los Angeles in December 2024 and is currently in review (permit number FCDP2024000547)

An LACFCD Letter of Conceptual Approval was obtained on January 25, 2024.

Existing Conditions

Existing Hydrology

- Infeasible to capture the 85th percentile design storm (**peak flow rate = 21 cfs; design storm volume = 13 ac-ft**) from the Sierra Madre Villa and New York Drain channels, which encompasses a 1,489-acre drainage area
- Feasible to capture the local road runoff from Sierra Madre Blvd (**peak flow rate = 0.91 cfs; design storm volume = 0.25 ac-ft**)

Proposed Design Approach

- Treats both **local and regional flows** to the maximum extent practicable
  - **Local**: Implements a green infrastructure system featuring infiltration and biofiltration basins within the median.
  - **Regional**: Treats up to 0.145 cfs of flow from the New York Drain and Sierra Madre Villa Channel via dry wells. Expected to infiltrate 100% of dry weather flows from the Sierra Madre Villa Channel and New York Drains, which will effectively reduce the dry weather bacteria loading in the downstream Eaton Wash. This project will also help address recent water quality impairment from the recent wildfire event (i.e. Eaton Fire).

Project Details

Current Site Conditions

- Sierra Madre is a major artery characterized by heavy traffic flow (two-way average daily traffic (ADT) of 16,900/day)

Land Ownership/Right-of-Way

- The Sierra Madre Blvd medians is within City of Pasadena right-of-way
- Proposed work within Sierra Madre Villa Channel is owned by the U.S. Army Corps of Engineers

Potential/Future Constraints

- Most of the construction will be within the median
  - Construction will require temporary closure of the lanes closest to the median
  - Long-term maintenance of the biofiltration and infiltration basins and the dry wells will be conducted in the medians
  - Cleaning via vactor truck is needed during long term maintenance and could require temporary closure of the nearest lane

Environmental Documents and Permits

- **Categorical Exemption (Class 1)**
  - Exempt from environmental review as a minor alteration of the street with no expansion of use
- **LACFCD Permits**
  - Major Modification Permit: Required for installing diversion structure within Sierra Madre Villa Channel and New York Drain.
  - Discharge Permit: Required for discharging treated stormwater into an existing LACFCD facility (biofiltration basins).
- **USACE Permits**
  - Section 408 Permit: Required for access to alter a USACE Civil Works Project.
- **Additional Regulatory Permits**
  - State Water Resources Control Board – Construction General Permit for disturbed soils during construction
  - San Gabriel Valley Mosquito & Vector Control District – Mosquito & Vector Abatement to address potential mosquito concerns
  - South Coast Air Quality Management District Rule 403 to prevent, reduce, or mitigate fugitive dust emissions from construction activities

Project Details

Technical Activities Completed

- Geotechnical Investigation – (April 2024)
- Stormwater Capture Strategy Memorandum
  - Covers basis, assumptions, and procedures in identifying alternatives
- Utility Data Review
- Preliminary Design Report
- Drainage Report
- Post-Construction Monitoring Plan
- O&M Plan
- Public Outreach
  - 2 open houses and 2 pop-ups (featuring surveys, comment cards, etc.)
- 100% Design Plans, Specifications, and Estimate Completed
- Environmental Permitting in Process

Vector Minimization

- A vector minimization plan has been submitted and accepted by the San Gabriel Valley Mosquito & Vector Control District.

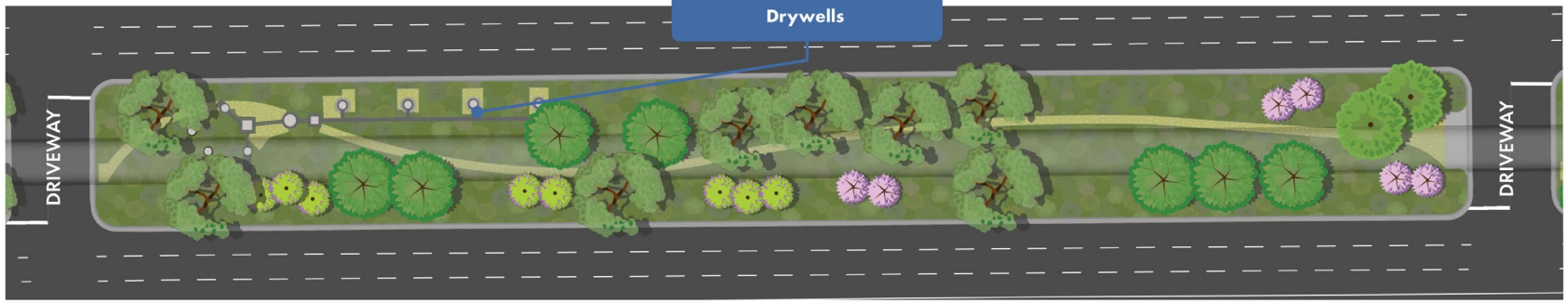
Project Schematic

SIERRA MADRE MEDIAN ENHANCEMENTS

PASADENA DEPARTMENT OF PUBLIC WORKS

Median # 3 Design

Drywells

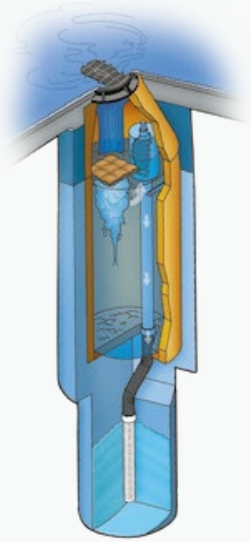


0 25 50 60 FT NORTH

LEGEND

- PERENNIALS AND GROUNDCOVER
- SHRUBS
- PLANTED COBBLE SWALE / BASIN
- SWALE PLANTS
- BOX CULVERT
- DRAINAGE
- STORMWATER BMPS

KEY MAP



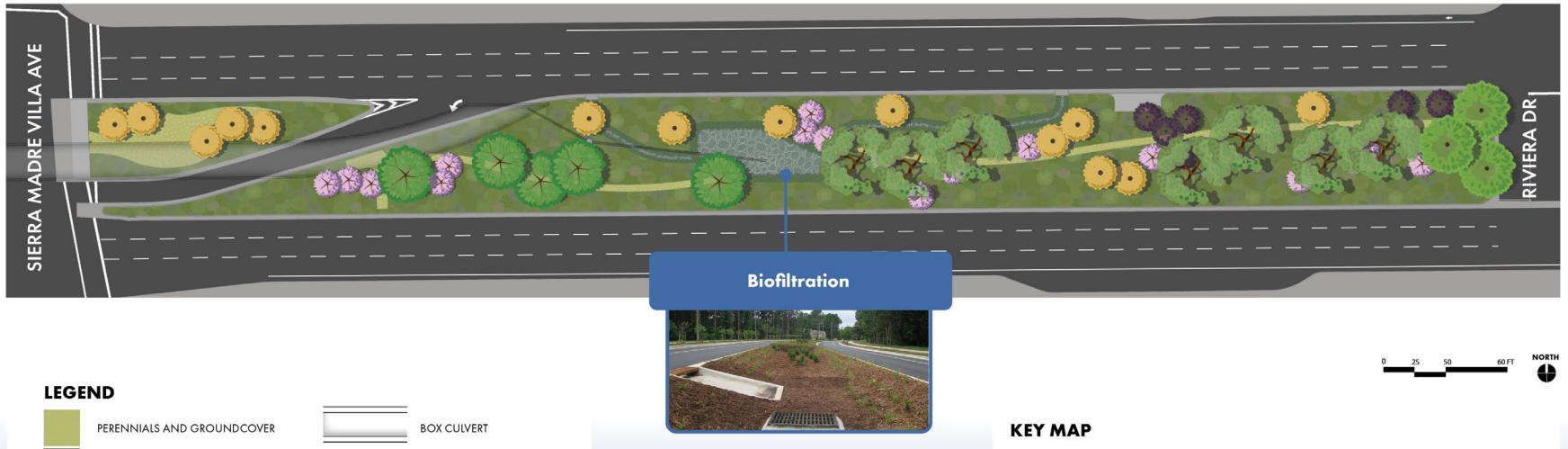
MaxWell Drywell

Project Schematic

SIERRA MADRE MEDIAN ENHANCEMENTS

PASADENA DEPARTMENT OF PUBLIC WORKS

Median # 5 Design

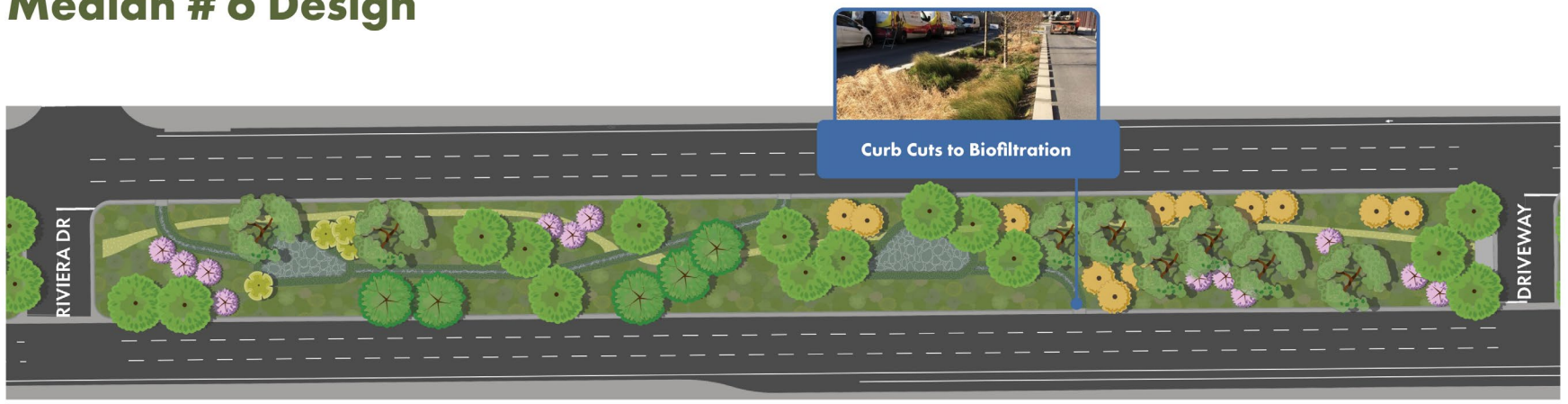


Project Schematic

SIERRA MADRE MEDIAN ENHANCEMENTS

PASADENA DEPARTMENT OF PUBLIC WORKS

Median # 6 Design



LEGEND

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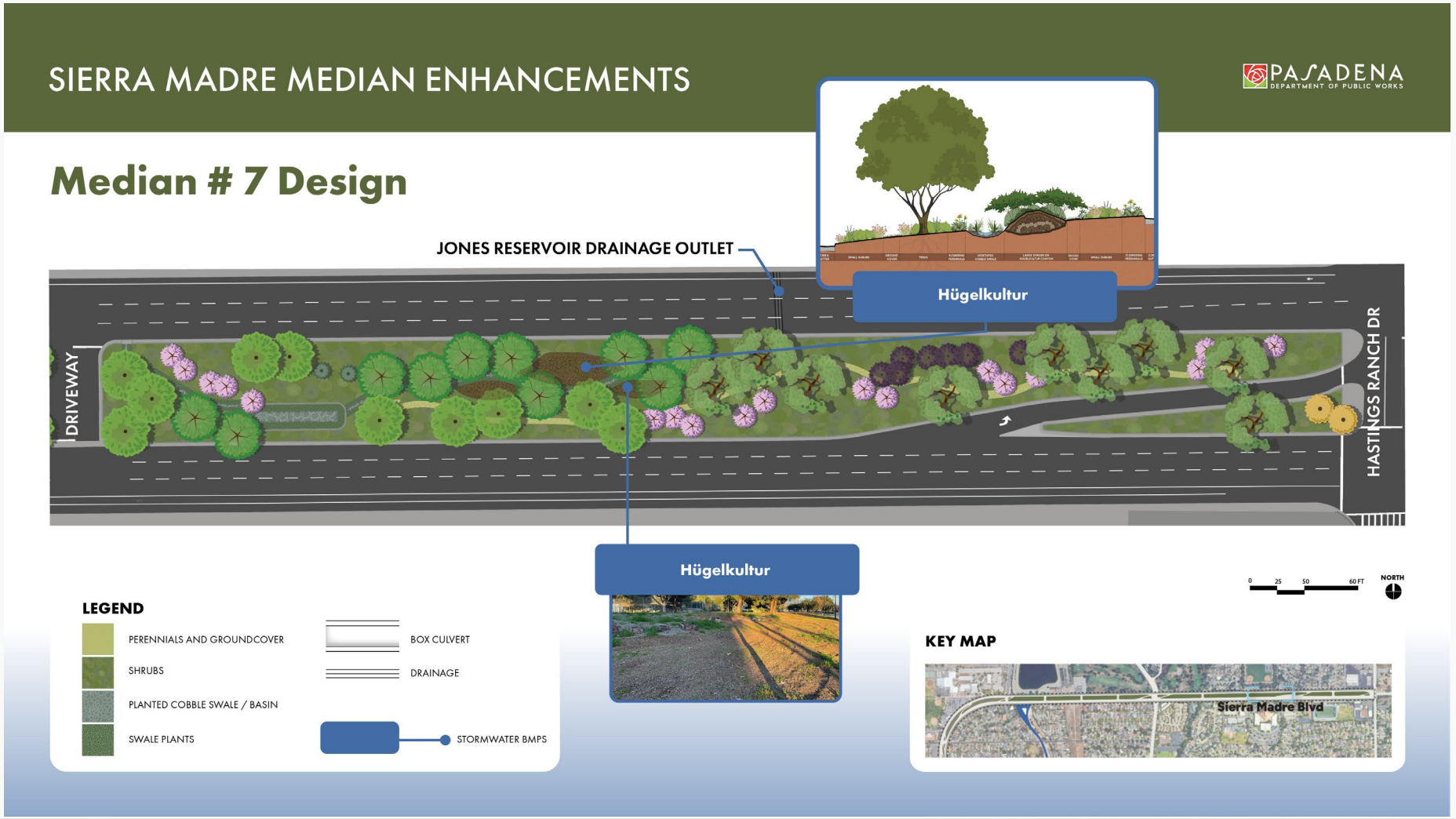
KEY MAP

Project Schematic



Cost and Schedule

PHASE	DESCRIPTION	COST	COMPLETION DATE
Planning	Technical Resources Program	$300,000	1/2/2023
Design	Final Design (30/60/90/100)	$1,050,000	1/22/2024
Construction	Construction Cost	$10,447,000	1/26/2026
Construction	Construction Administration and Design Support	$1,045,000	1/26/2026
Construction	Construction Survey	$30,000	1/26/2026
Construction	Agency Management (Construction)	$157,000	1/26/2026
TOTAL COST		**$13,029,000**	

Cost and Schedule (Continued)

ANNUAL COSTS	
Annual Maintenance Cost	$165,600
Annual Operation Cost	$0
Monitoring Costs	$35,000

LIFE-CYCLE COSTS	
Project Life Span	50 Years
Total Life-Cycle Cost	$17,842,176.48
Annualized Life-Cycle Cost	$743,613

Cost Share

TYPE OF COST SHARE	FUNDING AMOUNT	PHASE	COST SHARE STATUS	BRIEF DESCRIPTION
Agreement	$8,500,000	Construction	In Progress	• Caltrans Cooperative Agreement in place awaiting final adoption • Funding status is in flux awaiting USACE and LACFCD permit approval • City is requesting full funding from the Safe, Clean Water Program to ensure the project can be realized if Caltrans funding is no longer available

- Total Cost Share: $8,500,000
- Leveraged Funding Percentage: 68%

Funding Request

YEAR (FISCAL YEAR)	SCW FUNDING REQUEST	PHASE	EFFORTS DURING PHASE AND YEAR
Year 1 (FY 2026-27)	$10,447,000	Construction	Construction Contract, Year 1 Budget
Year 1	$157,000	Construction	Agency Project Management, Year 1
Year 1	$1,045,000	Construction	Construction Administration, Year 1
Year 1	$30,000	Construction	Construction Survey and Staking, Year 1
Total Year 1	**$11,679,000**		
Year 2 (FY 2027-28)	$165,600	O & M	Construction Contract, Year 2 Budget
Year 2	$35,000	Monitoring	Agency Project Management, Year 2
Total Year 2	**$200,600**		
Year 3 (FY 2028-29)	$165,600	O & M	Construction Contract, Year 3 Budget
Year 3	$35,000	Monitoring	Agency Project Management, Year 3
Total Year 3	**$200,600**		
Year 4 (FY 2029-30)	$165,600	O & M	Construction Contract, Year 4 Budget
Year 4	$35,000	Monitoring	Agency Project Management, Year 4
Total Year 4	**$200,600**		
Year 5 (FY 2030-31)	$165,600	O & M	Construction Contract, Year 5 Budget
Year 5	$35,000	Monitoring	Agency Project Management, Year 5
Total Year 5	**$200,600**		
TOTAL	**$12,481,400**		

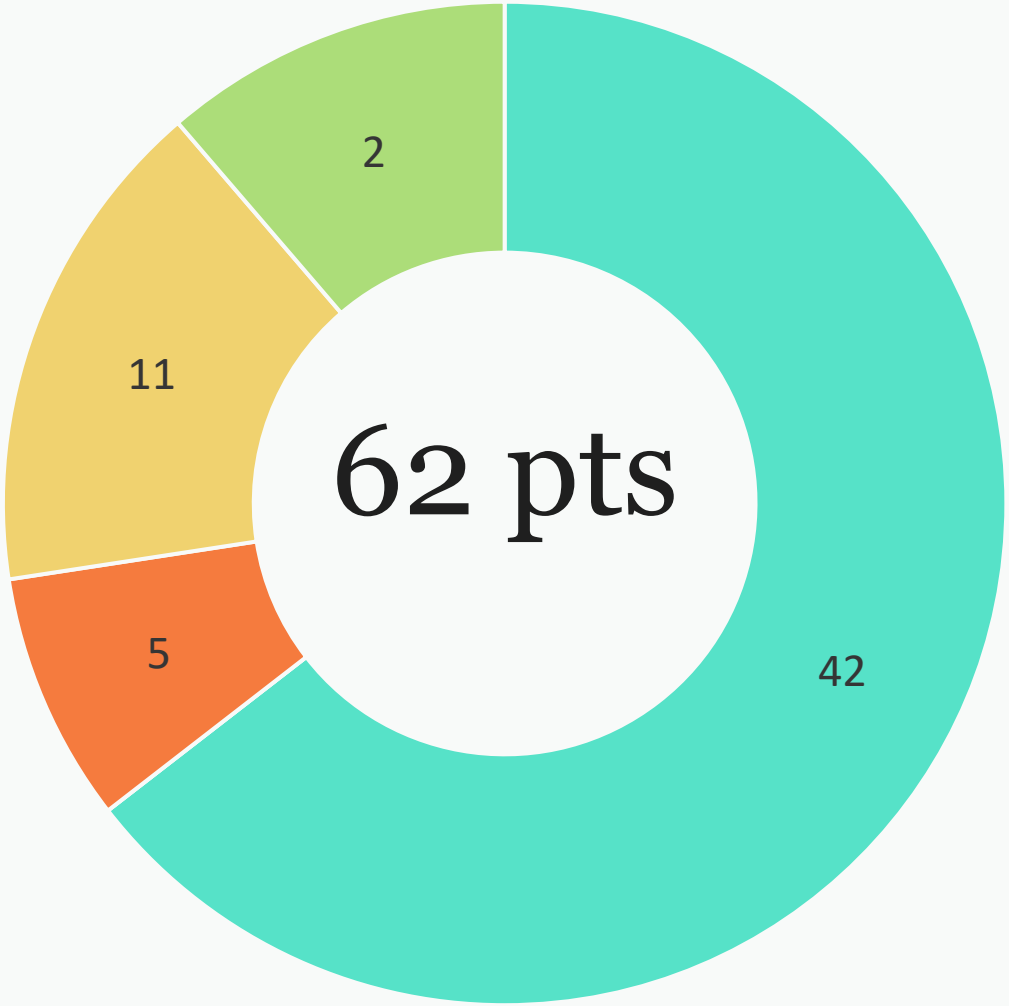
- Potential Future SCW Funding Request: Yes – Continued O&M

Metrics & Measures

	PROJECT BENEFIT METRICS	METRIC
Improve Water Quality	Zinc load reduction (lbs/year)	N/A
	Total Phosphorous load reduction (lbs/year)	N/A
Increase Drought Prepared-ness	Increase Local Water Supply through Stormwater Capture (ac-ft/year)	67.04
	Increase local supply through groundwater recharge and storage (ac-ft/yr)	67.04
Improve Public Health	Net area of park and green space created (acres)	5
	Net area of green space at schools created (acres)	N/A
	Net area of park enhanced or restored (acres)	0
	Net area of canopy, cooling, and shading surfaces (acres)	11.32
	Net new trees planted	473
Deliver Multi-Benefit Projects	Net area of habitat created, enhanced, restored, protected (acres)	8.384
Promote Green Jobs & Career	Annual Full Time Equivalent Jobs Created	52.28

Final Score by Scoring Committee

- Water Quality
- Community Investment Benefits
- Nature Based Solutions
- Leveraged Funds and Community Support

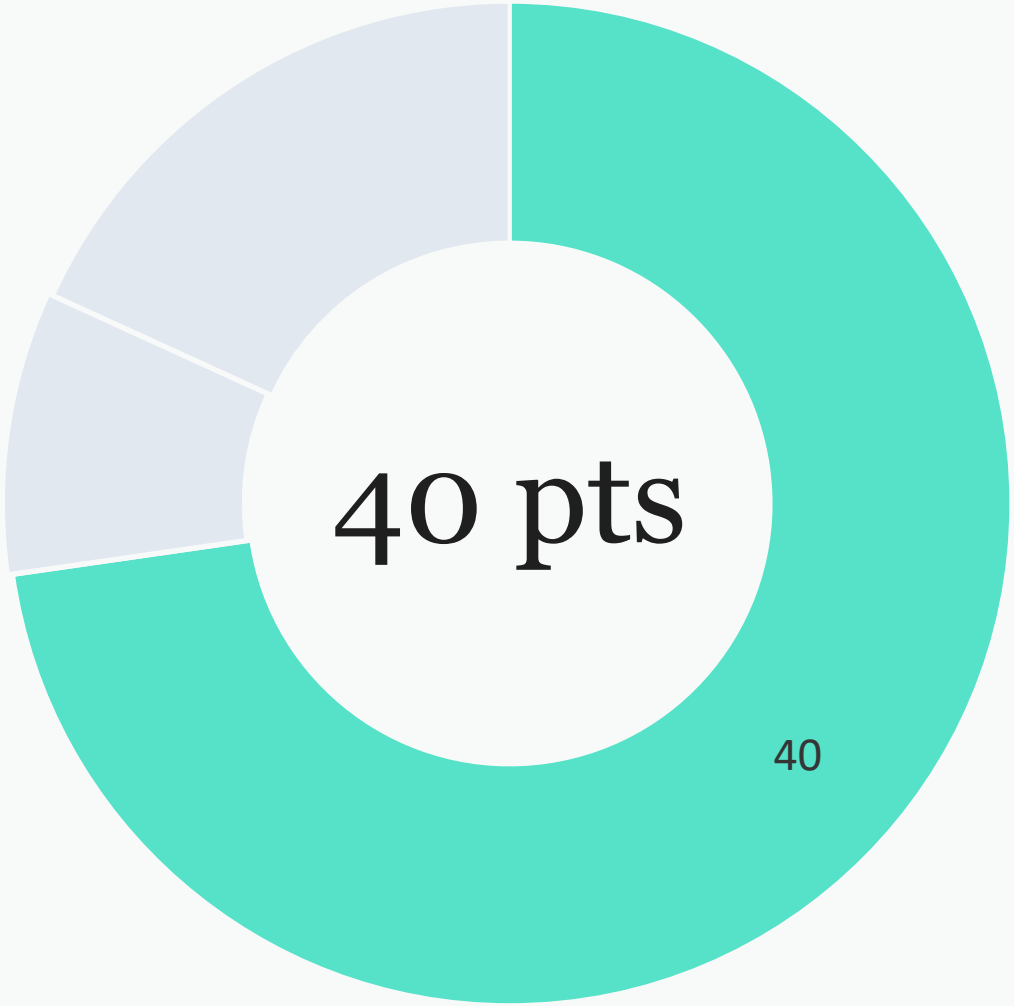


* The Scoring Committee confirmed this score on October 20, 2025

Score Breakdown

Water Quality

- This project's water quality section was scored based on the original scoring criteria. The Water Quality Benefit scoring criteria has two parts:
  - For dry weather projects, designs must capture, infiltrate, treat and release or divert 100% of dry weather flows: This project achieves this criterion, earning a score of **20 points**.
  - For dry weather BMPs only, score is contingent on whether the BMP is larger or smaller than 200 acres: This projects tributary size is larger than 200 acres, earning a score of **20 points**.
- Grand Total of **40 points** for the Water Quality Section



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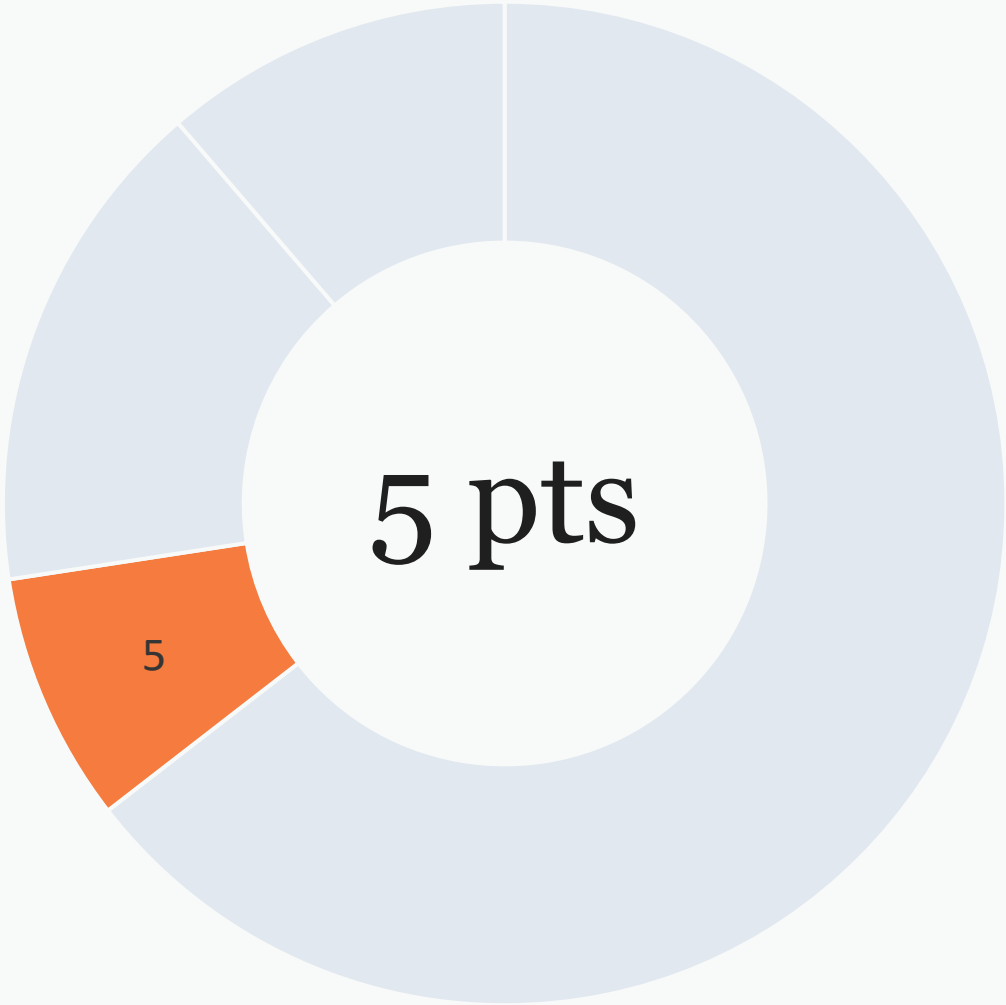
Score Breakdown

Community Investment Benefits

The project will provide community investment benefits for the following criteria:

- Create or enhance new recreational opportunities
- Reducing local heat island effect and increasing shade
- Increase tree count/shade increase

Because the project provides three community benefit opportunities, the project **received 5 points** for the community investment benefits section.



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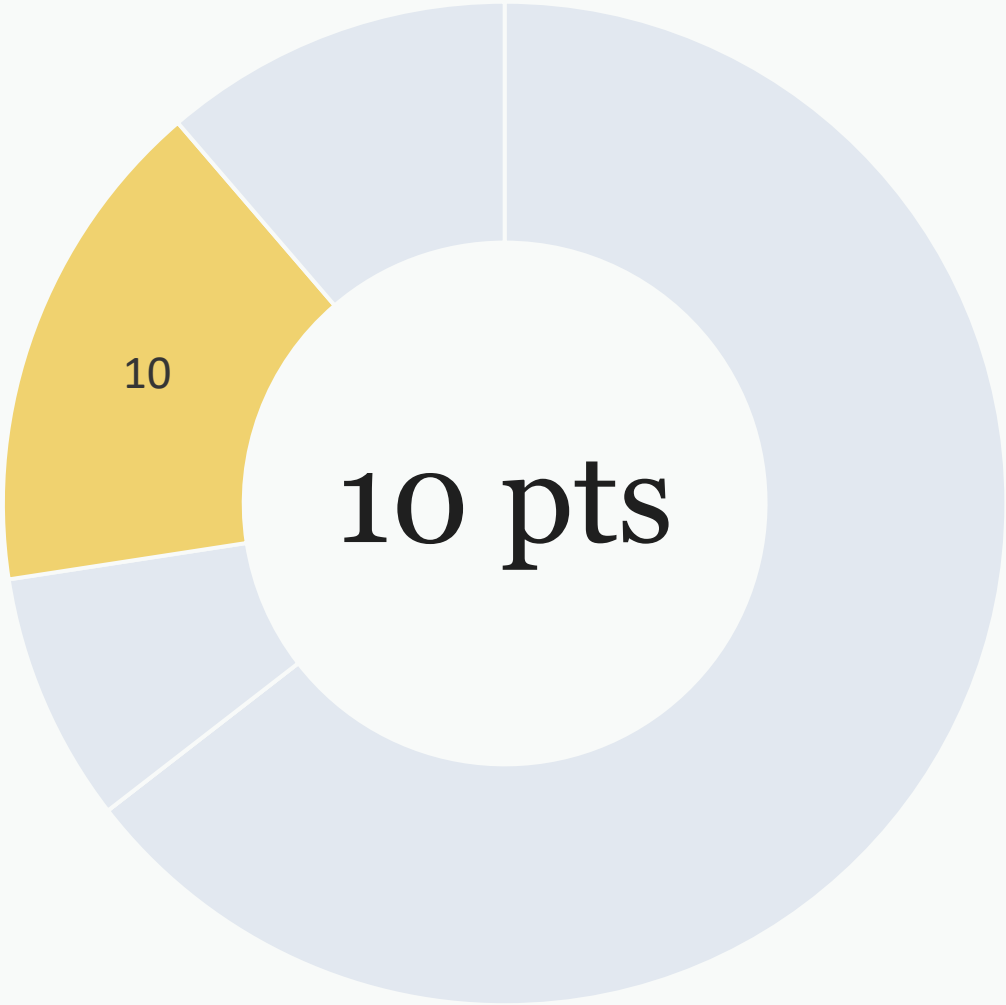
Score Breakdown

Nature-Based Solutions

Nature-based solutions are a central focus of this project's design approach with the generous width of the median allowing for a variety of nature-based improvements.

- Proposed features include dry wells, biofiltration basins, infiltration basins, vegetated swales, hügelkultur mounds, and numerous planting areas with 45 new species.
- These elements will improve water quality in the downstream watershed, enhance local ecological value, and contribute to the visual character of the corridor.

The project is characterized as "Better" under the Good-Better-Best framework. The project received **10 points** for the nature-based solutions section.



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Score Breakdown

Leveraged Funds and Community Support

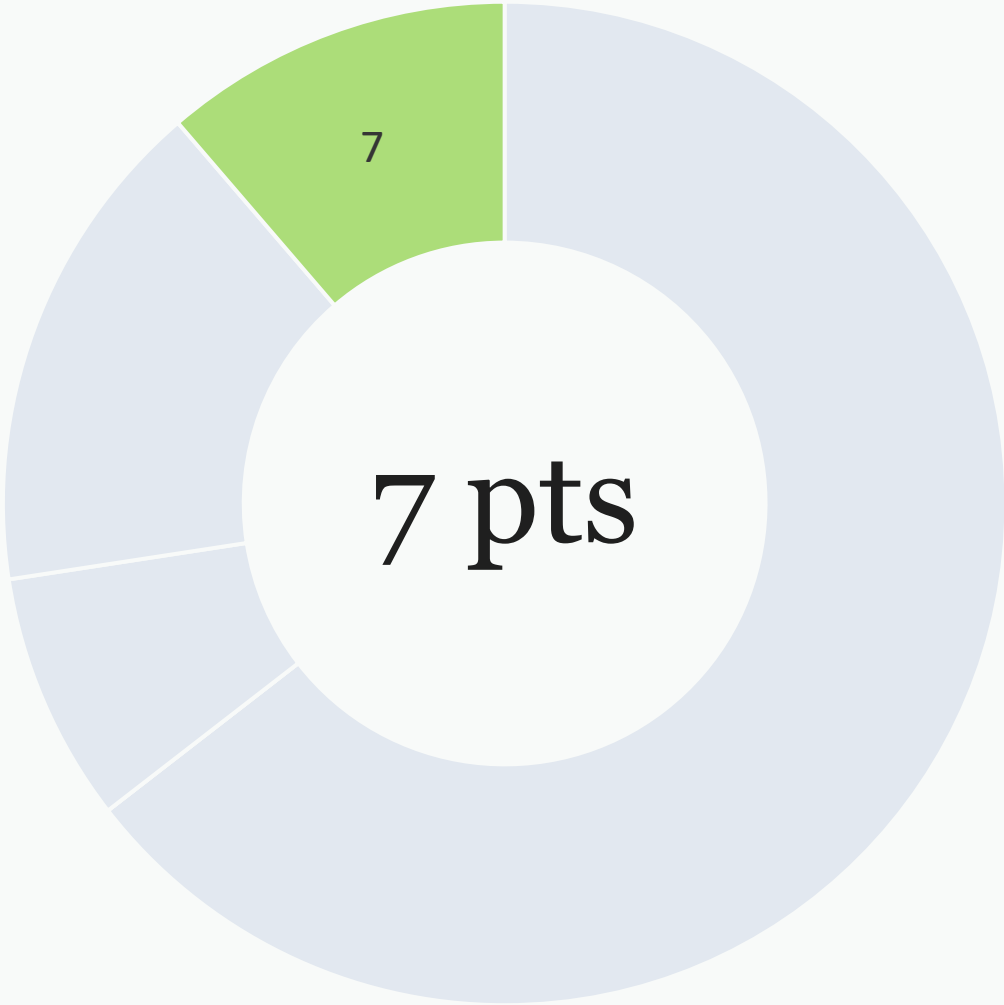
The project received a letter of commitment from Caltrans for $8.5 million, which will cover greater than 50% of the construction funding request. From these Caltrans leveraged funds, the project was awarded **3 points**. It is important to note that CalTrans funding is in flux with the U.S. Army Corps of Engineers Section 408 permit.

- City is requesting full funding from the Safe, Clean Water Program to ensure the project can be realized if Caltrans funding is no longer available

The project demonstrates strong community backing, supported by two-way engagement workshops and letters from six organizations, earning **4** points.

- Multiple open houses and pop-ups were held featuring custom, visually engaging materials and highly interactive activities and installations.

This results in a total of **7 points** for the Leveraged Funds and Community Support Section.



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Thank you

QUESTIONS?

Dawn Petschauer, City of Pasadena
Nicole Rieger, Dudek
Merrill Taylor, Craftwater