

An aerial photograph of the Los Angeles coastline and city grid, showing the ocean on the left and the city on the right. The image is partially obscured by a dark teal overlay on the left side where the text is located.

La Crescenta Green Improvement Project

Funding Program (Infrastructure Program)

Fiscal Year 2022-2023

Upper Los Angeles River SCW Watershed Area

County of Los Angeles

Kevin Chang



Project Overview

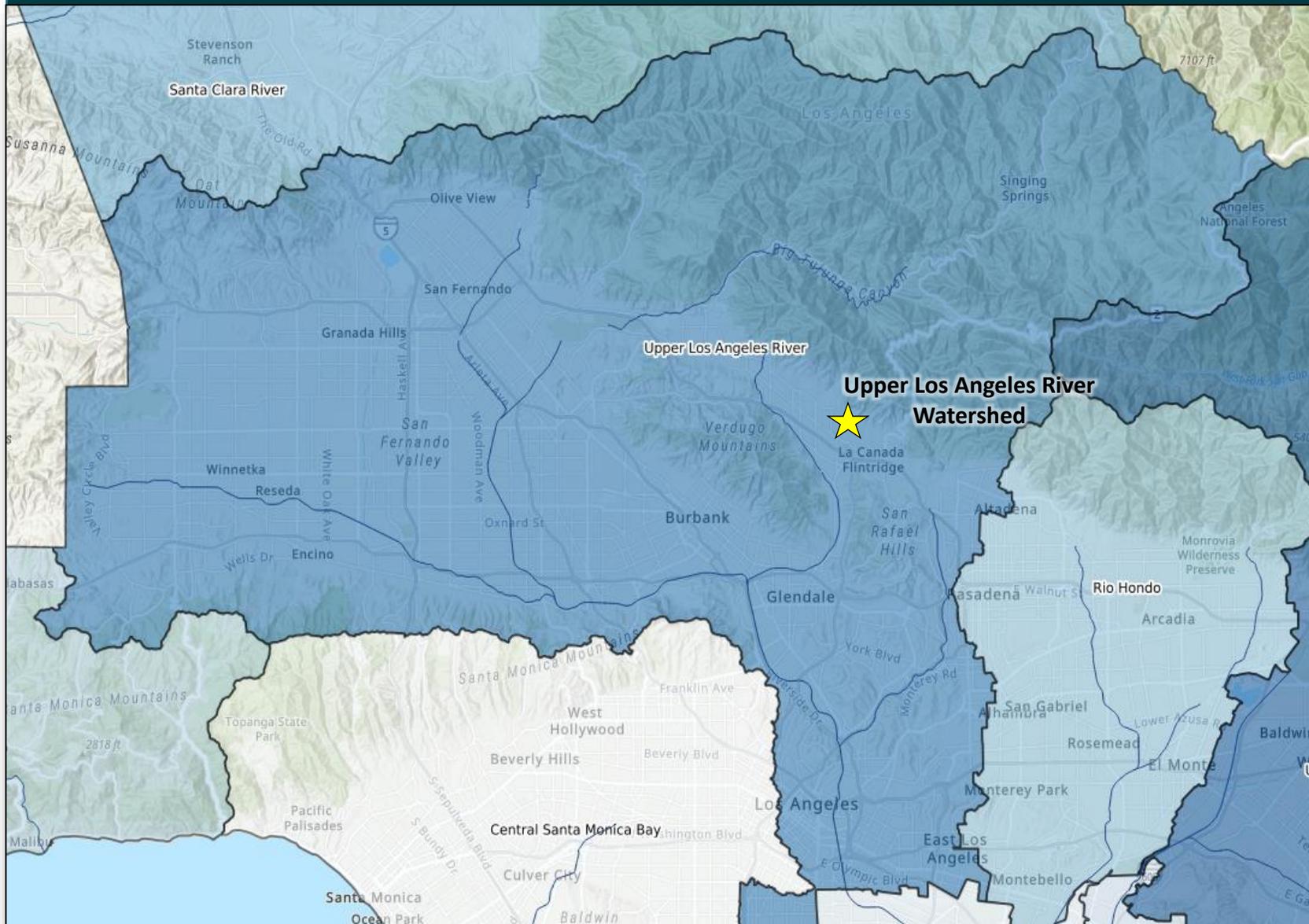
La Crescenta-Montrose green improvement to capture stormwater and urban runoff, retrofit parkways with bioswales, increase local tree canopy, repair roadways, and reconstruct curb ramps to current ADA standards.

- **Primary Objective:** Water Quality
- **Secondary Objectives:** Water Supply, Community Investment, Nature-Based Solutions, Leverage Funding
- **Project Status:** Planning Phase
- **Phases for which SCW funding is being requested:** Design, Construction
- **Total Funding Requested:** \$1,500,000





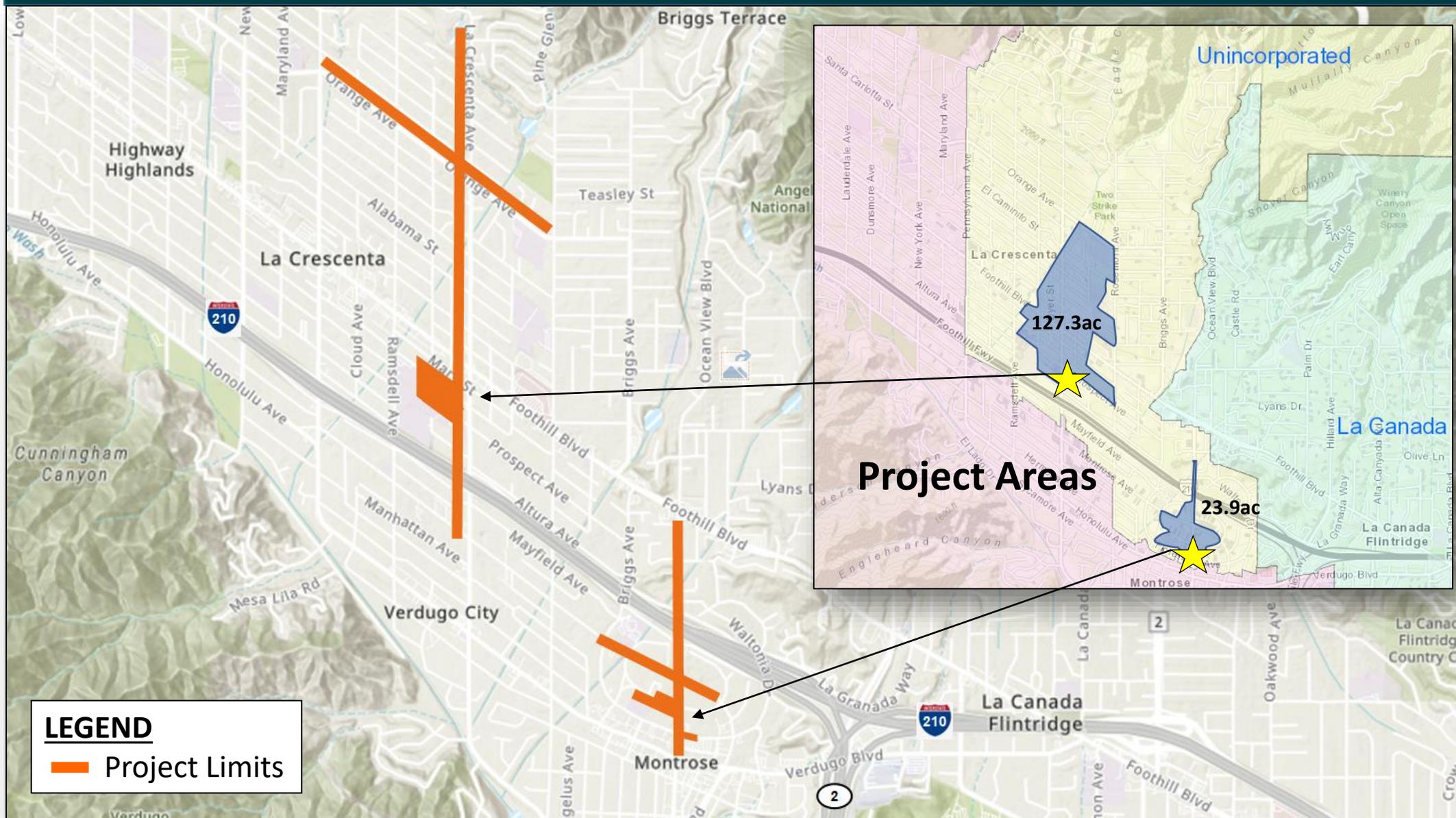
Project Background



- Location: ULAR by I-210, La Crescenta & Montrose Communities
- GLAC IRWMP (via ULAR EWMP)

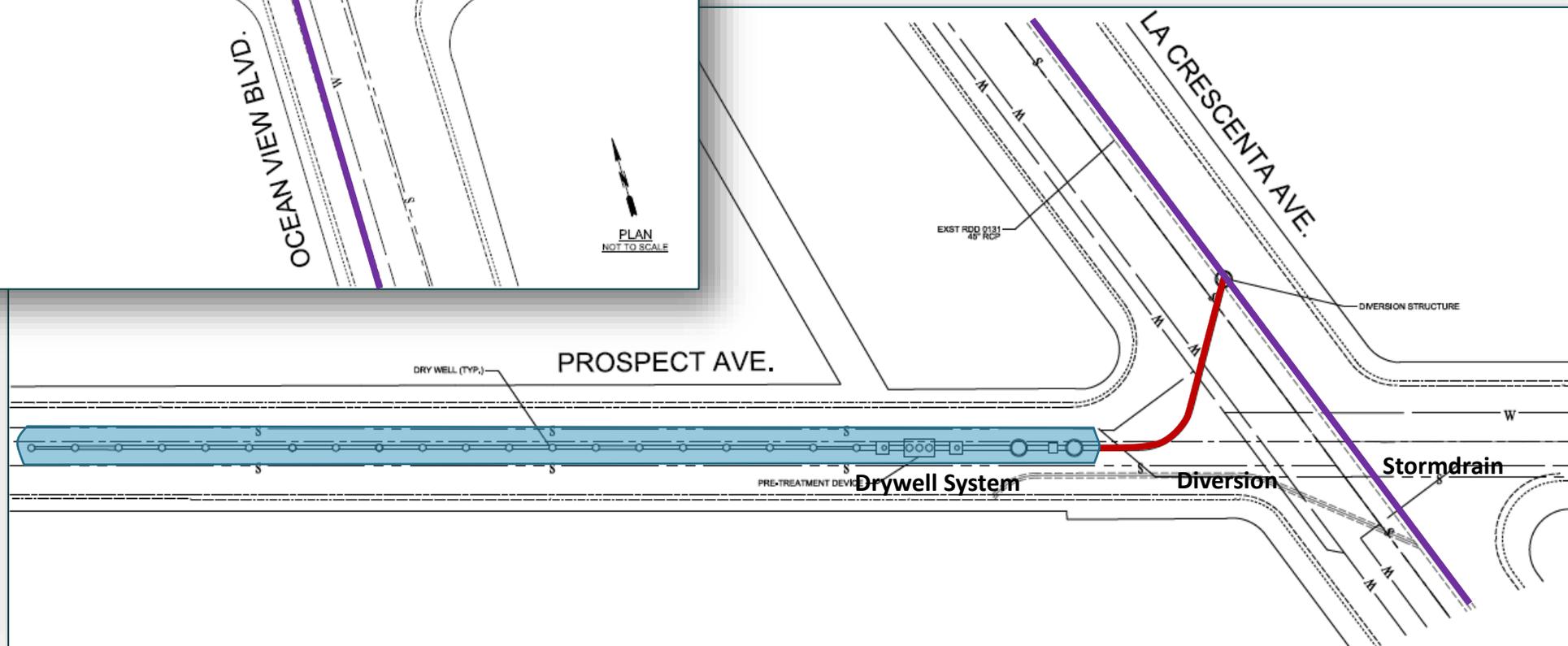
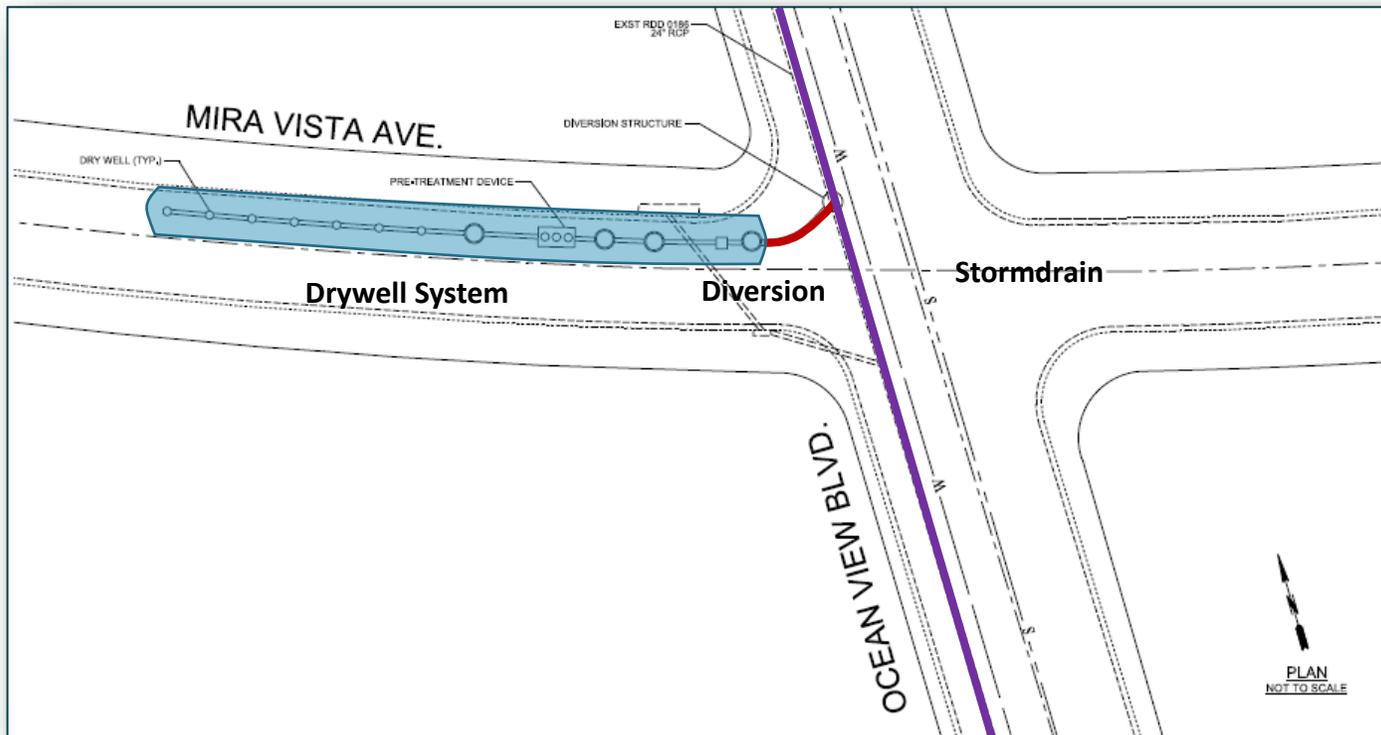


Project Background



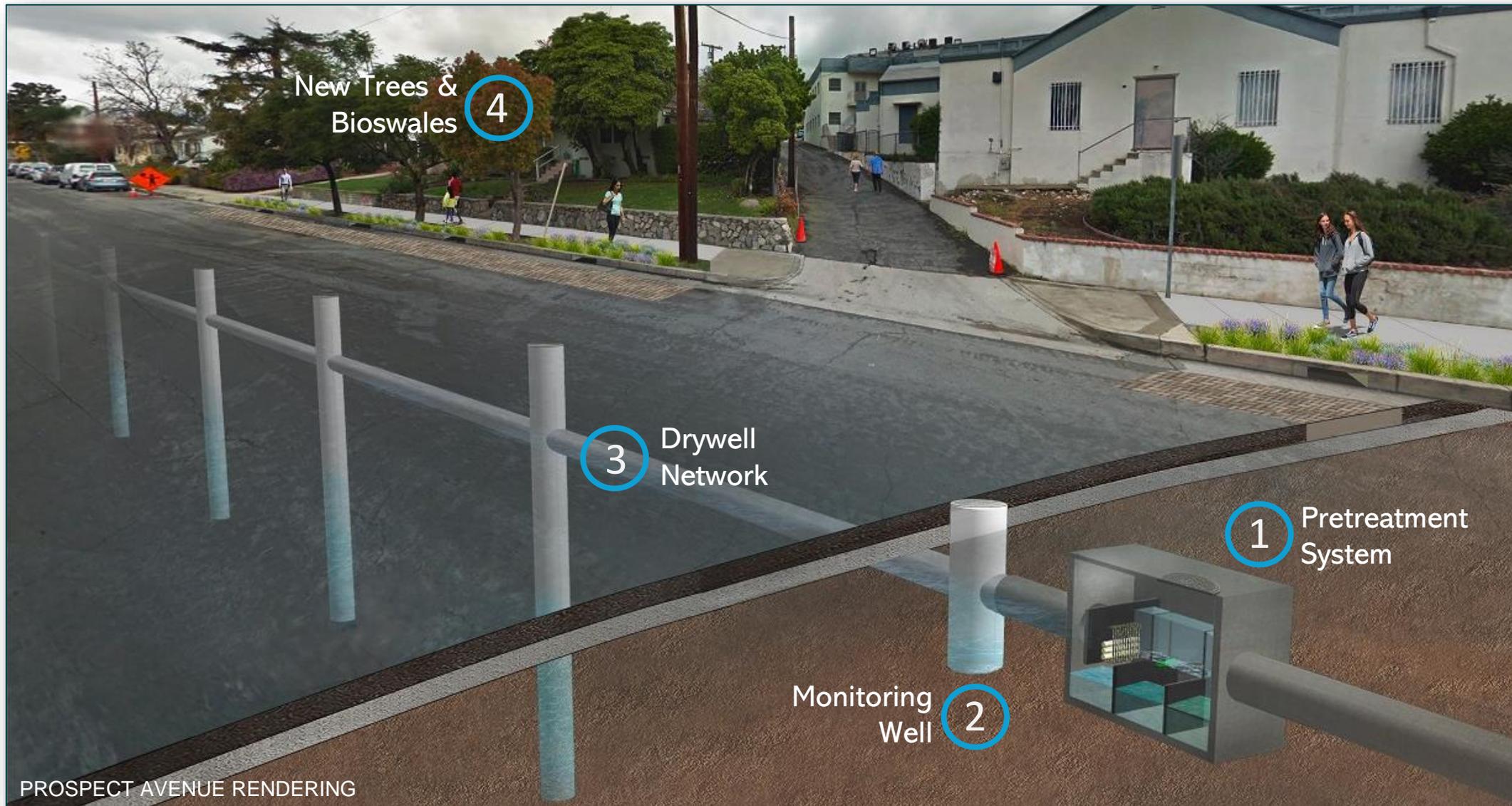


Project Details



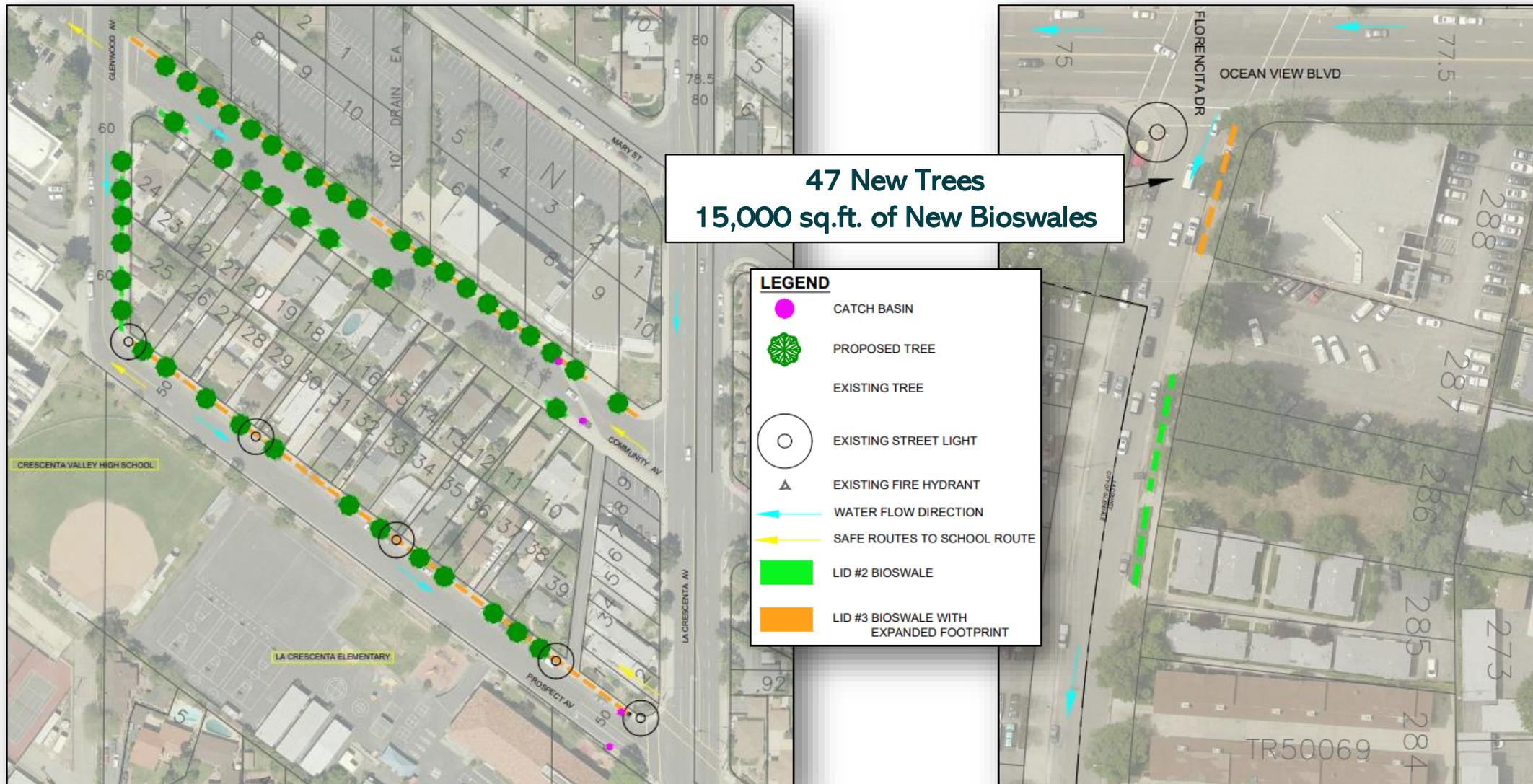


Project Details





Project Details





Cost & Schedule

Phase	Description	Cost	Completion Date
Design	Preliminary Engineering; Preparation of Plans, Specifications & Estimates	\$1,155,000	Late 2022
Construction	Construction; Construction Engineering	\$6,305,000	Mid 2024
TOTAL		\$7,460,000	

- Annual Costs \$350,000
- Project Lifespan 50 Years
- Lifecycle Cost \$16.4M



Funding Request

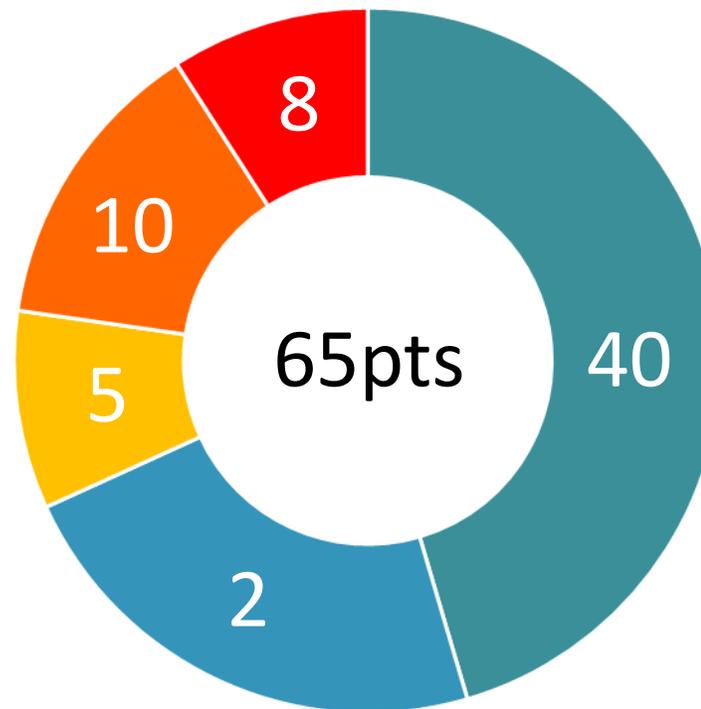
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$500,000	Design	Preliminary Engineering; Preparation of Plans, Specifications & Estimates
2	\$500,000	Construction	Construction; Construction Engineering
3	\$500,000	Construction	Construction; Construction Engineering
TOTAL	\$1,500,000		

- Leveraged Funding: \$1.5M (>50%)
- Invested/Spent Funds: \$400k



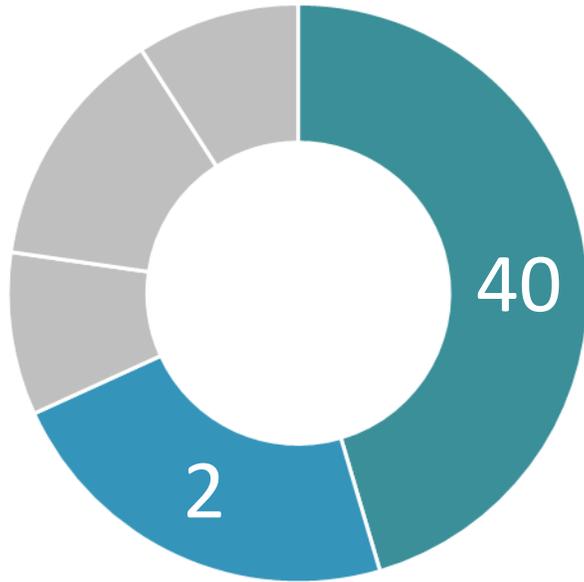
Preliminary Score

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





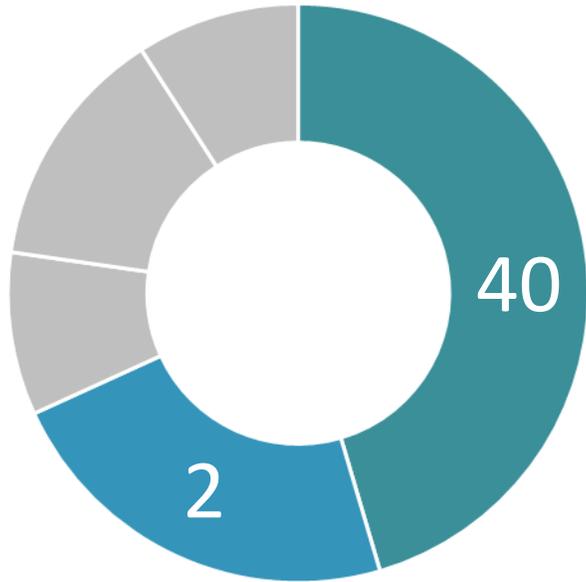
Water Quality & Water Supply Benefits



- Wet & Dry Weather Capture
- Pollutant Reduction (Bacteria & Metals TMDL's)
 - Bacteria: 64% Removal
 - Metals: 60% Removal
- 151 acre Tributary Area
- 7.57 acre-feet Capacity (85th Percentile Storm)



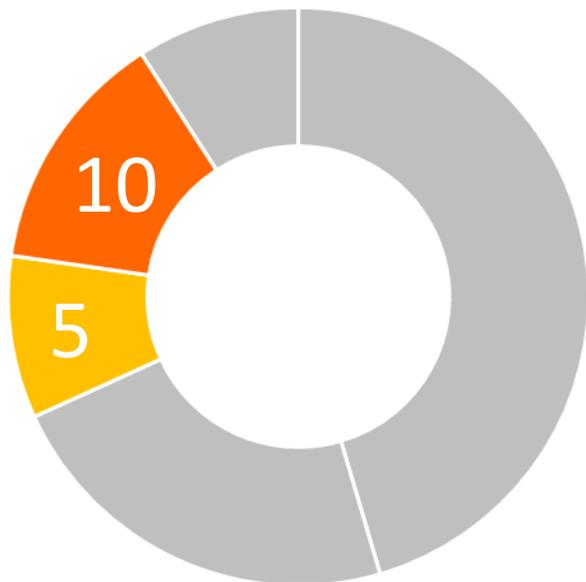
Water Quality & Water Supply Benefits



- 27 Dry Wells
- 36 acre-feet Annual Water Supply Volume
- Water Supply (Recharge Water Supply Aquifer)



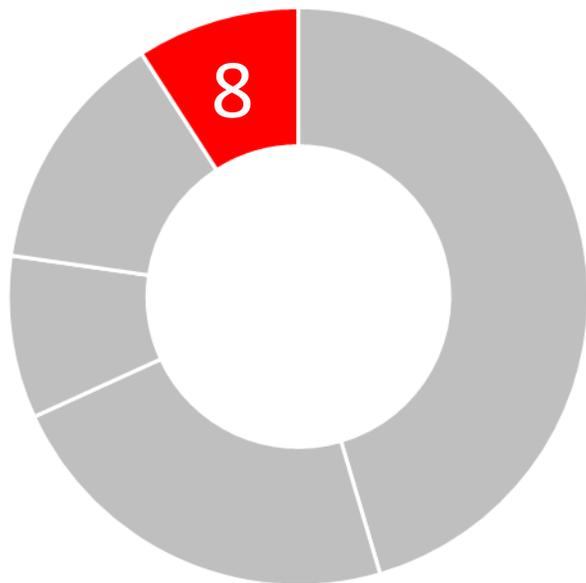
Community Investment Benefits and Nature Based Solutions



- Community Investment Benefits
 - ADA accessible curb ramps
 - Road repairs to lessen wear and tear on vehicles
 - School route aesthetic enhancement
- Nature Based Solutions
 - 15,000 square feet of new bioswales
 - 47 new trees
 - Native plantings



Leveraging Funds and Community Support



- Leveraging Funds
 - \$1,500,000 (>50% match)
 - SCW Municipal and/or County Capital Projects Funds
 - Status: In Progress
- Community Support
 - Community Outreach Meetings
 - Crescenta Valley Town Council Meetings (Monthly, Ongoing)
 - Community Meeting #1 (May 6th, 2021)
 - Community Meeting #2 (Design Phase, TBD)
 - Community Meeting #3 (Construction Phase, TBD)
 - Crescenta Valley Town Council Support
 - TreePeople Support



Questions?

An aerial photograph of a coastal city, likely Los Angeles, with a blue overlay on the left side. The text is overlaid on the blue area.

Winery Canyon Channel and Descanso Gardens Stormwater Capture and Reuse Project

Infrastructure Program

Fiscal Year 2022-2023

Upper Los Angeles River Watershed

Descanso Gardens and City of La Cañada Flintridge

Juliann Rooke (Descanso Gardens), Mike Rudd (Geosyntec Consultants) and Ruth Siegel (RIOS)



Project Overview

Multi-benefit project employing creative solutions to improve sustainable operations and water quality for multiple stakeholders.

- **Primary Objective:** Stormwater capture, treatment, and reuse to off-set imported potable water demand
- **Secondary Objectives:** Volume and pollutant load reduction in the upper Arroyo Seco Watershed
- **Project Status:** Infrastructure Program Funding Request for Design, Construction, Monitoring and O&M
- **Total Funding Requested:** \$6,848,600





Project Background

- Descanso Gardens Master Plan process launched in November 2018.
- Final Master Plan and CEQA Mitigated Negative Declaration approved by LAC Board of Supervisors on October 13, 2020.
- Key Master Plan objectives include:
 - Reduce reliance on imported water
 - Capture and reuse stormwater
 - Improve water infrastructure efficiency
 - Community engagement and education
- TRP application submitted by City of La Cañada Flintridge in collaboration with Descanso Gardens.

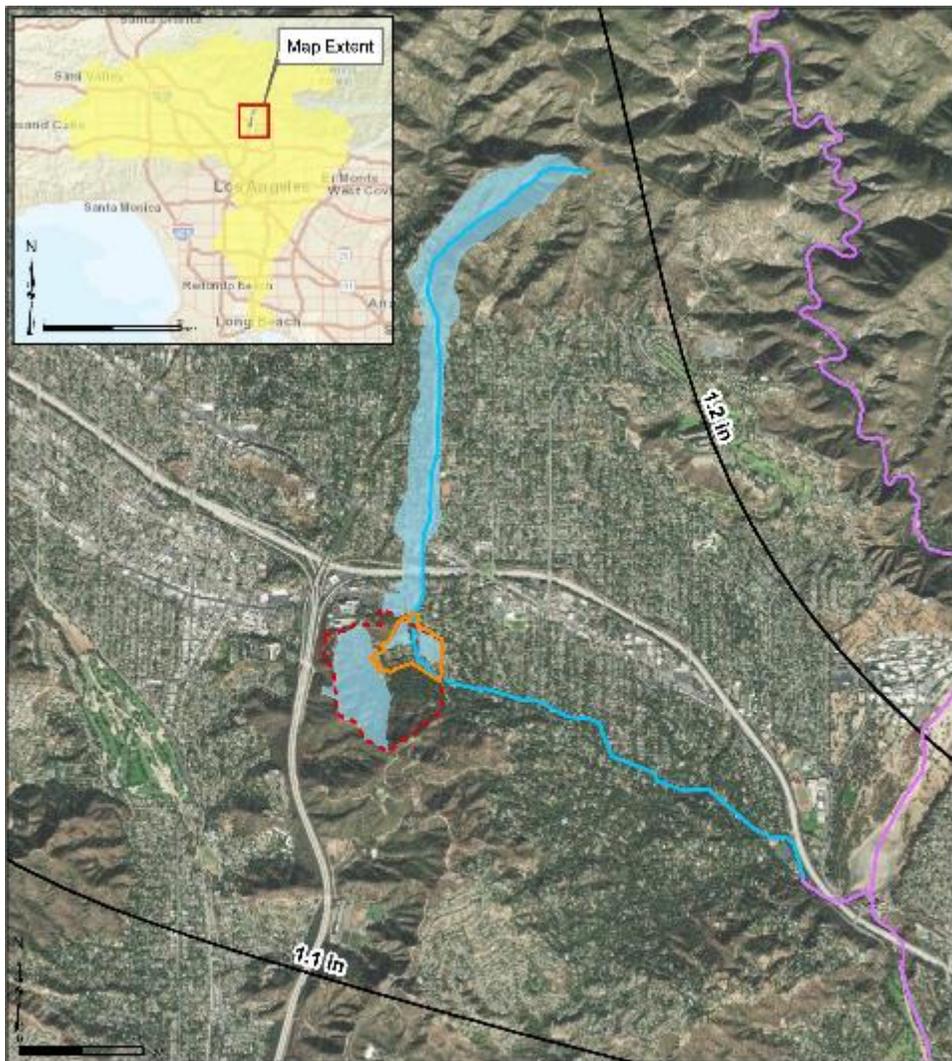


Project Background

- Project site visit and conceptual design workshop held in April and May 2021, respectively.
- Presented to ULAR Watershed Management Group in July 2021, for concurrence with intent of the Enhanced Watershed Management Program.
- Project location meets both the pollutant load reduction and sustainability goals of La Cañada Flintridge and Descanso Gardens, respectively.
- The project layout in the Feasibility Study further assessed the common Master Plan elements.



Project Location



- Legend**
- Project Location
 - Descanso Gardens Boundary
 - Project Capture Areas
 - Los Angeles River
 - Winery Canyon Channel
 - 95th Percentile, 24-Hour Isohyet
 - Arroyo Seco

Project Location and Capture Areas
 Winery Canyon Channel and Descanso Gardens
 Stormwater Capture and Reuse Project
 La Cañada Flintridge, CA



Figure

CWR0068 September 2021



- Legend**
- Project Location
 - Descanso Gardens Boundary
 - Project Capture Areas
 - Winery Canyon Channel



Project Location and Capture Areas
 Winery Canyon Channel and Descanso Gardens
 Stormwater Capture and Reuse Project
 La Cañada Flintridge, CA

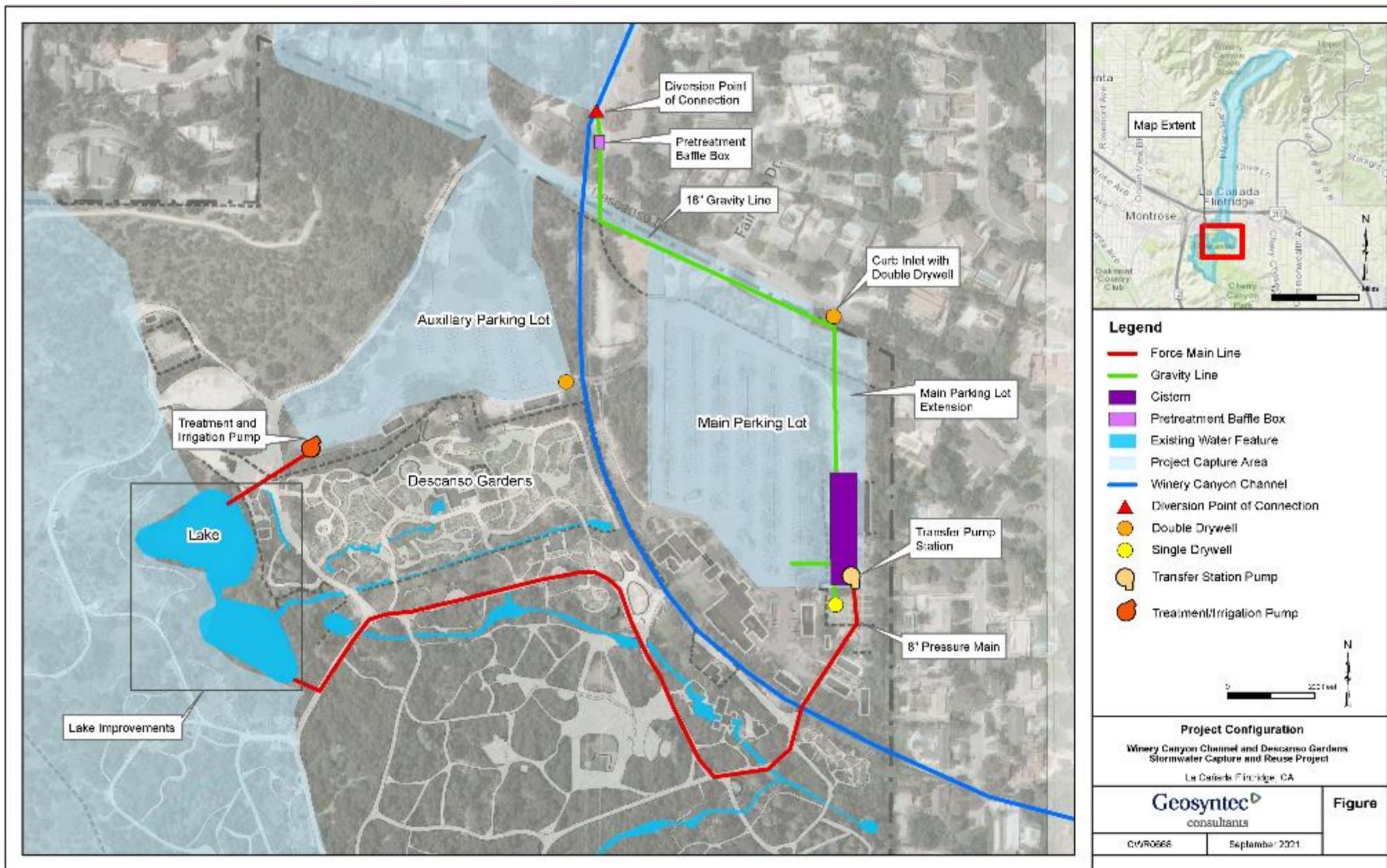


Figure

CWR0068 September 2021



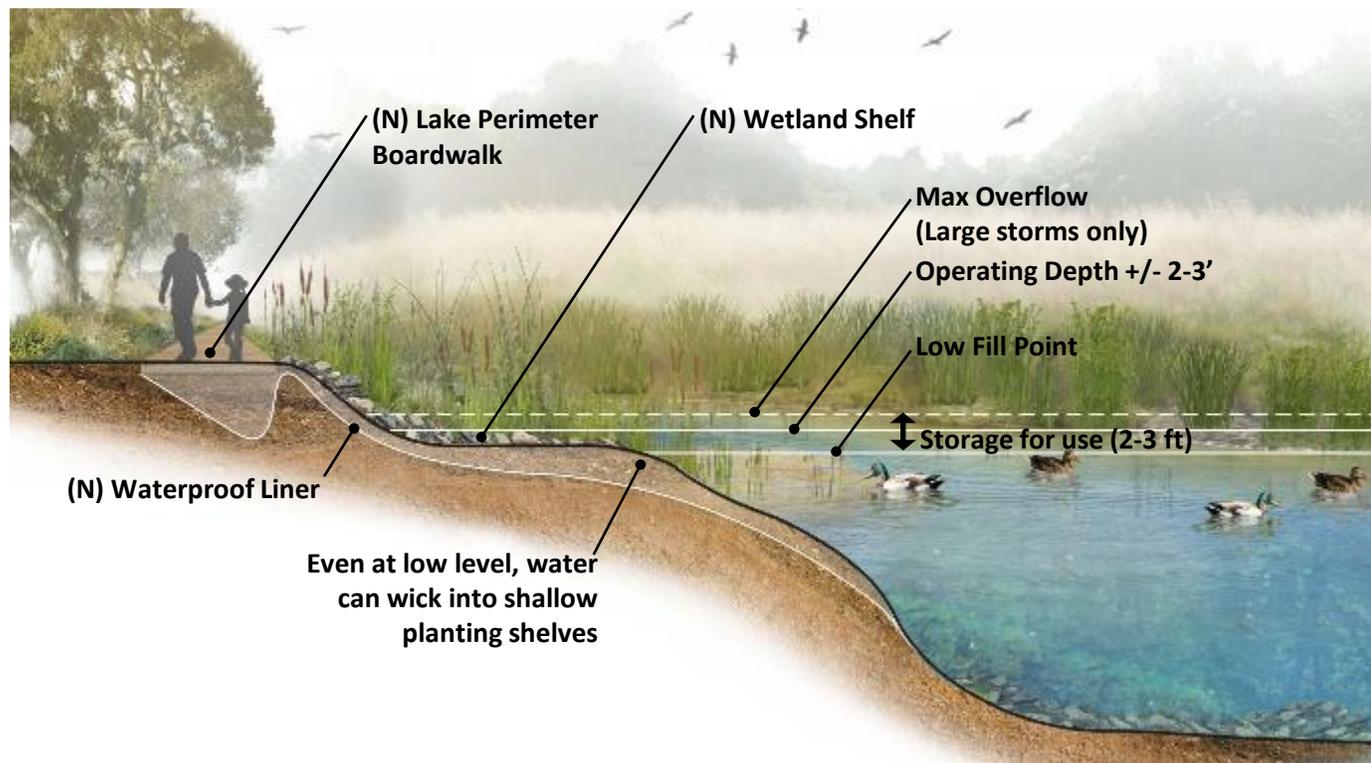
Project Details





Project Details

Lake Improvements (from Descanso Gardens Master Plan)



Images on slide are from Descanso Gardens Mas



Project Details

Main Parking Lot Extension (from Descanso Gardens Master Plan)



Reference Imagery of Planted Parking Lots

Images on slide are from Descanso Gardens Master Plan 2020



Cost & Schedule

Phase	Description	Cost	Completion Date
Design	One-year design phase; includes permitting, right-of-way, and CEQA amendment costs	\$793,800.00	07/2023
Construction	Construction cost including CM	\$8,164,800.00	09/2025
TOTAL		\$8,958,600.00	

- Annual Costs Include Monitoring and O&M:
 - Monitoring = \$68,000
 - Operations = \$12,000
 - Maintenance = \$110,000
- Project Lifespan & Lifecycle Costs:
 - Project life = 40 years
 - Annual lifecycle = \$15,000,000
 - Total lifecycle = \$570,000



Funding Request

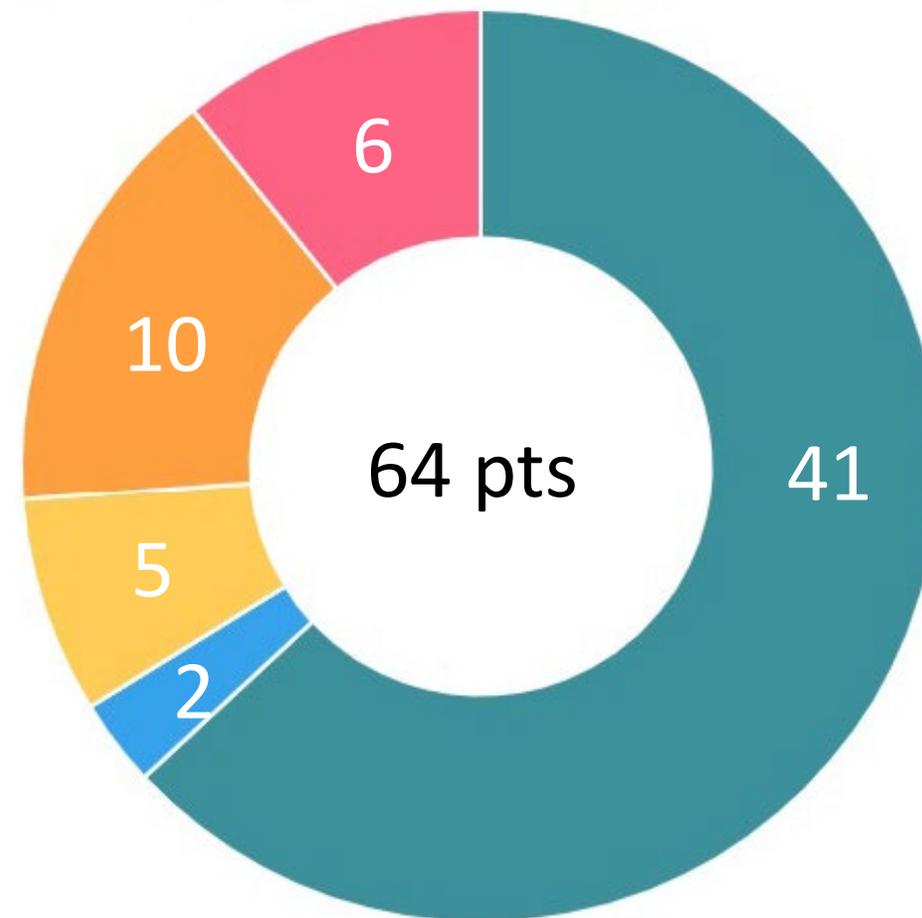
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$493,800.00	Design	Design, permitting, CEQA amendment, easements
2	\$588,076.00	Construction	Lake improvements, mobilization, half of CM Manage
3	\$1,663,068.00	Construction	Channel diversion to cistern, drywells, pump & treatment, excavation and gravel base for cistern, 1/4 CM
4	\$3,913,656.00	Construction	Cistern, transfer pumps, 1/4 CM
5	\$122,000.00	O&M	1-year O&M
5	\$68,000.00	Monitoring	1-year Monitoring
TOTAL	\$6,848,600.00		

- Leveraged Funding = \$2,300,000.00 (25.14%)



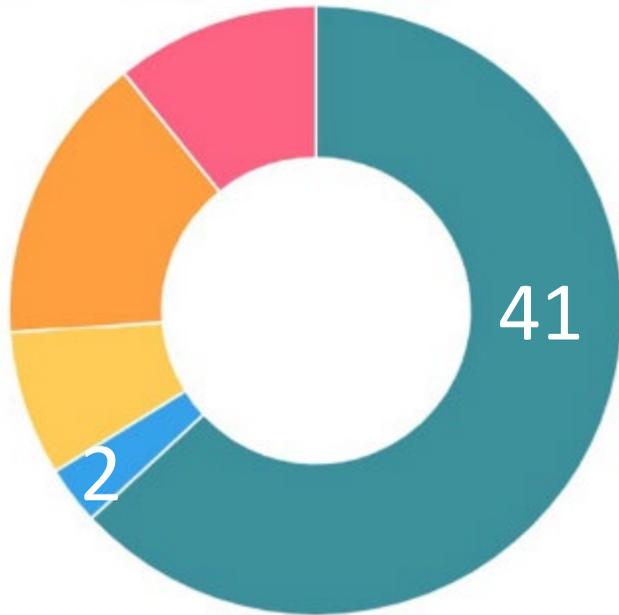
Final Score

- Water Quality
- Water Supply
- Community Investment
- Nature-Based Solutions
- Funds & Community





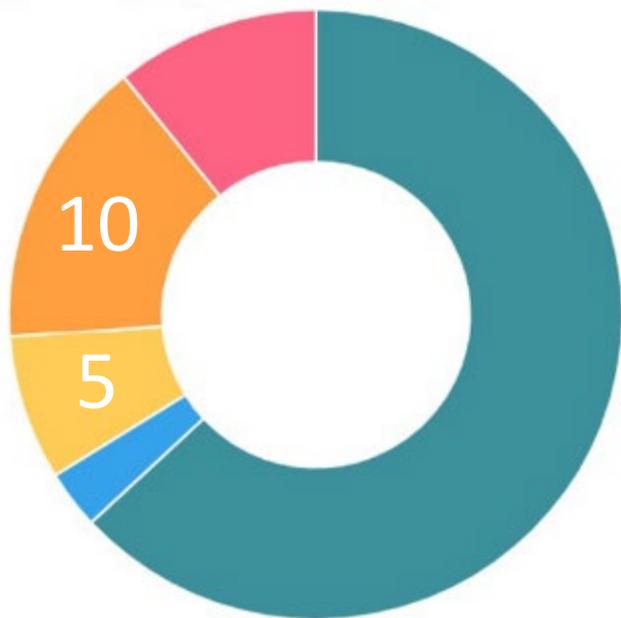
Water Quality & Water Supply Benefits



- Water Quality (*41 points*) and Supply (*2 points*) features:
 - Diversion and pretreatment from Winery Canyon Channel to cistern
 - Descanso Drive runoff to double drywell
 - Main Parking Lot runoff to cistern
 - Auxiliary Parking Lot to single drywell
 - Lake storage
 - Pump and treatment for non-potable uses
- Pollutant Reduction = 80.5%
- Tributary Area = 311.2 acres
- 24-hour volume inflow and capacity = 4.9 acre-feet
- Annual volume capture = 63.5 acre-feet



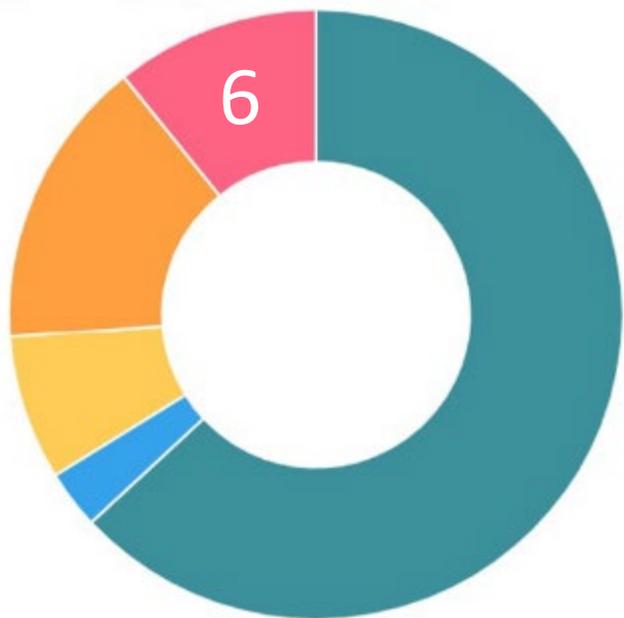
Community Investment Benefits and Nature Based Solutions



- Community Investment Benefits (*5 points*)
 - Improve flood management, conveyance, risk mitigation
 - Creates/enhances habitat and wetlands
 - Creates new recreational opportunities
 - Increase vegetation and shade
- Nature Based Solutions (*10 points*)
 - Lake improvements to provide higher ecological function
 - “Living edge” to create wetland shelf along perimeter
 - Floating wetlands
 - New native vegetation within Main Parking Lot Extension
 - BMP selection of drywells to mimic natural processes by promoting infiltration



Leveraging Funds and Community Support



- Leveraging Funds (*Part 1: 3 points*)
 - Descanso Gardens benefactor = \$2.0M
 - Descanso Gardens Guild Operating Budget = \$300K
 - Total leveraged funds = \$2.3M (25.14%)
- Community Support (*Part 2: 3 points*)
 - Pasadena Audubon Society
 - Senator Anthony Portantino
 - Santa Monica Mountains Conservancy
 - La Cañada Flintridge Trails Council
 - Valley Water Company
 - YMCA of the Foothills



Questions?