

Mission Mile Sepulveda: A Climate Resilient Urban Greenway to Cultural Connections Project

Funding Program - Infrastructure Program

Fiscal Year 2023-2024

Upper Los Angeles River Watershed

Project Lead: Ana Tabuena-Ruddy, PLA

Department of Public Works, StreetsLA

City of Los Angeles

Presenter: Merrill Taylor (Craftwater Engineering)

Previously Awarded TRP? - No



Project Overview

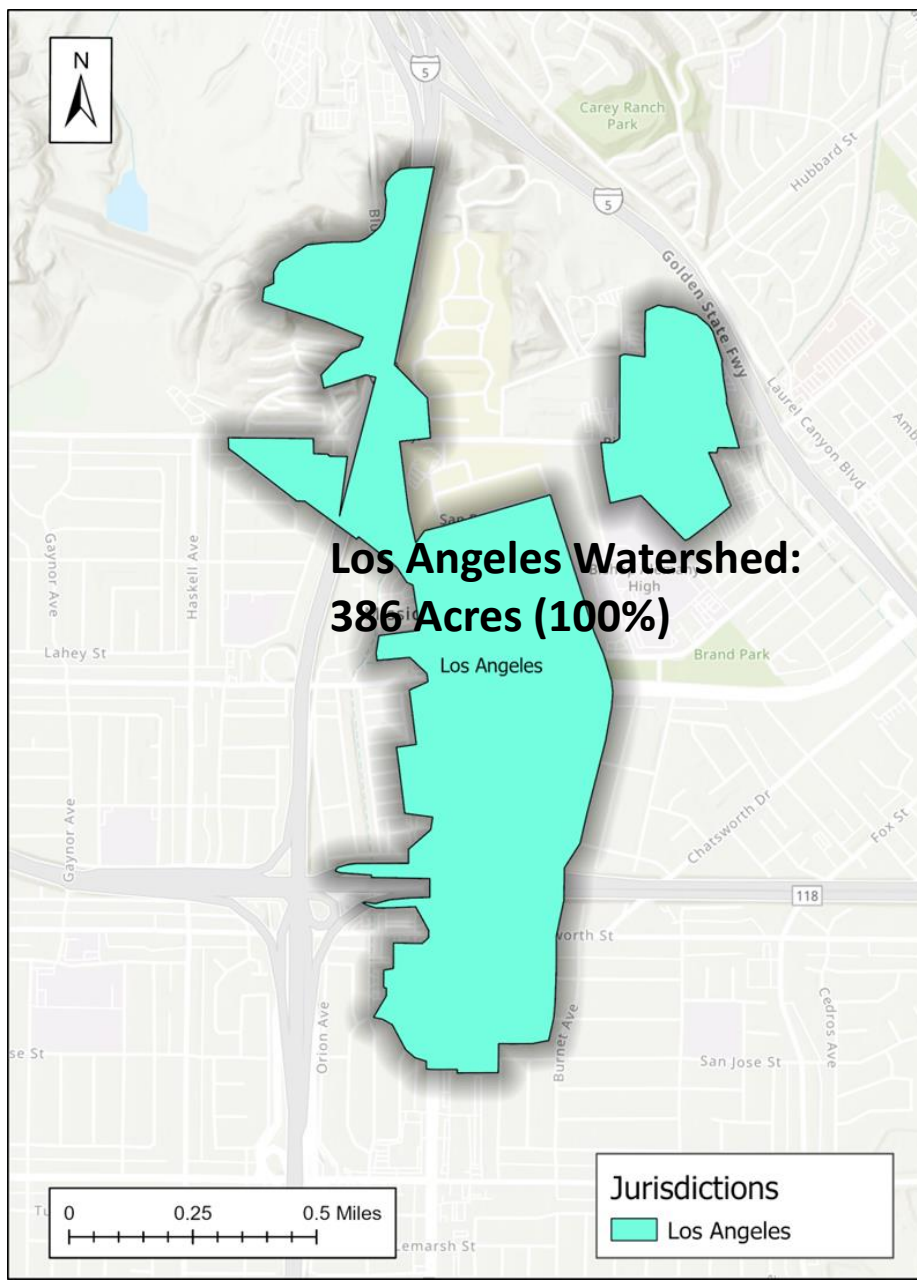
Regional and onsite stormwater capture and infiltration facility along 3.63 miles of Sepulveda Blvd between Rayen Street and Rinaldi Street

- **Primary Objective:** Increase corridor safety and transportation options while improving WQ within the Upper LA River through nature-based stormwater management solutions
- **Secondary Objectives:** Stimulate economic growth & public education
- **Project Status:** SCW funding request for Design, Bid/Award, & Construction
- **Total Funding Requested:** \$22,914,301





Project Location – Watershed Map

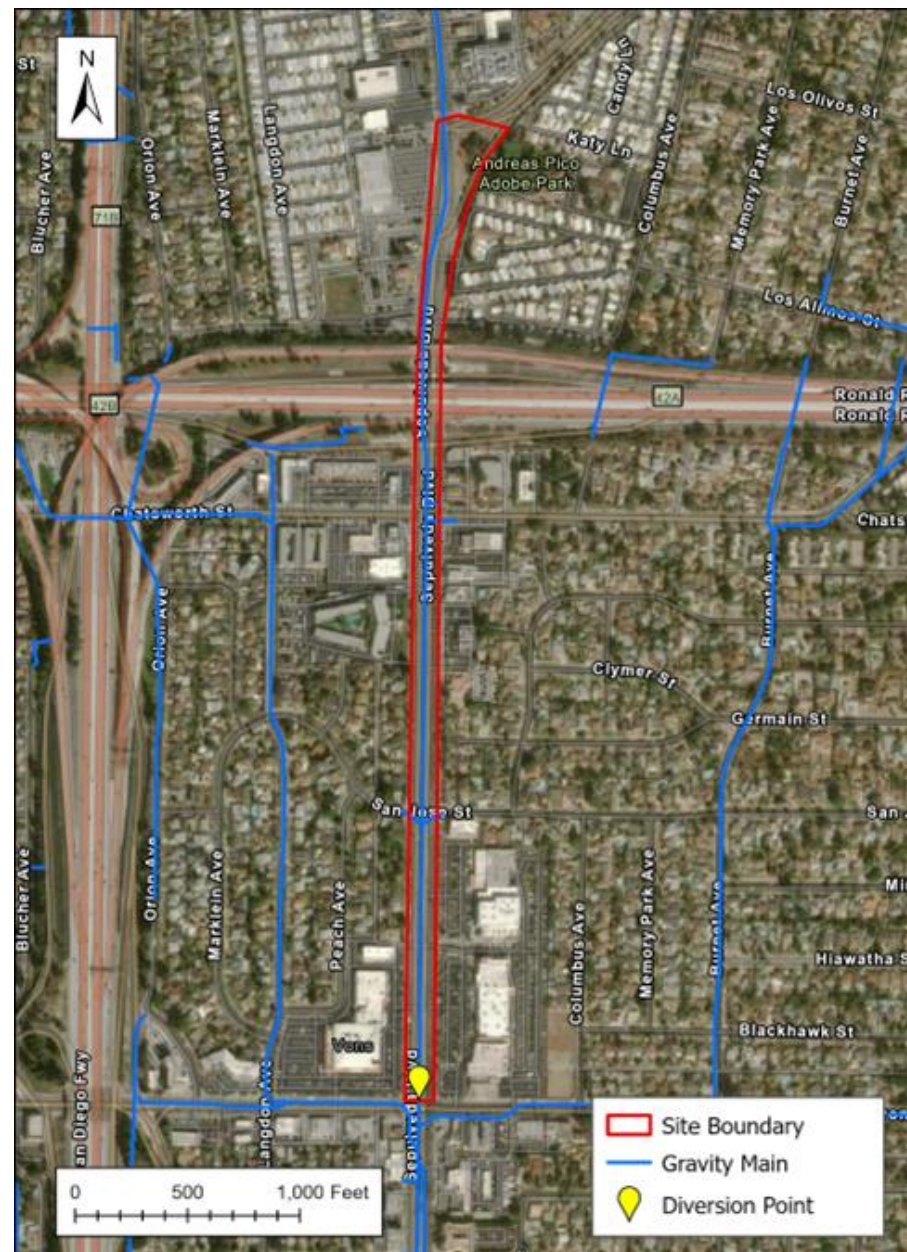
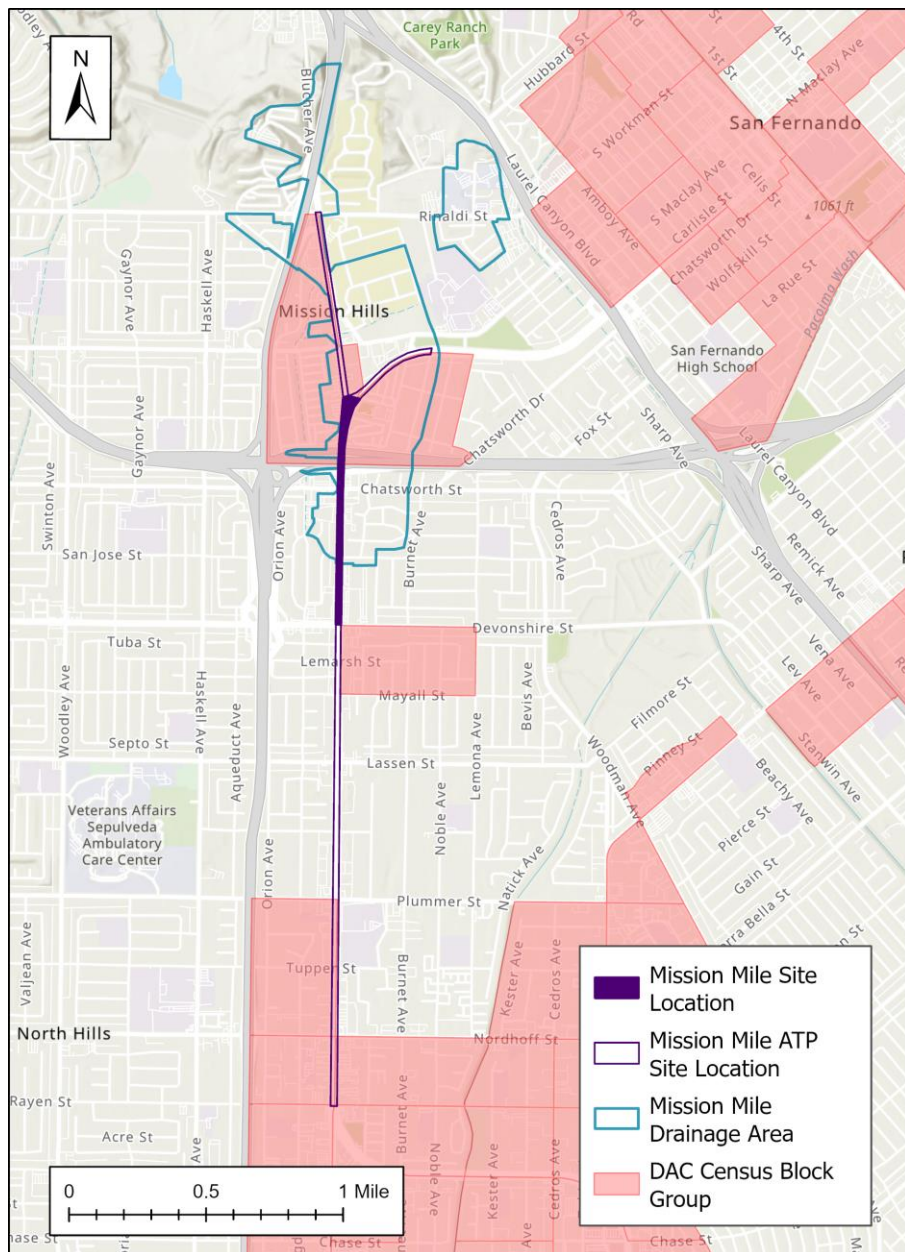


- Capture area jurisdiction:
 - City of Los Angeles
- Watershed Capture Area:
 - 386 acres

Land-use	Area (acres)	% of Impervious
Single Family Residential	33.7	15.6%
Multi-Family Residential	14.3	6.6%
Commercial	54.2	25.1%
Institutional	32.0	14.8%
Industrial	6.1	2.8%
Highways & Interstates	27.0	12.5%
Secondary Roads & Alleys	48.8	22.6%
TOTAL	216	100%



Project Location – Project Area & DAC Communities





Project Background

- Why was the Project Location selected?
 - WQ improvements to ULAR with needed alternate transportation improvement & disadvantaged community support
- How was the Project developed?
 - Corridor layout alternatives, community input, and incorporation of potential stormwater features
- Which regional water management plan includes the proposed project?
 - EWMP – regional BMP capacity in subwatershed 667649
- Description of benefits to municipality/municipalities
 - New bike/walking paths and median to enhance public safety, increased tree canopy and habitat, treat 85th percentile storm flows
- Description of benefits to Disadvantaged Communities
 - Increased pedestrian & bike safety, stimulate economic growth



Partners

- Who are the implementation partners already identified?
 - City of Los Angeles, Department of Public Works, StreetsLA
- What communities or groups have expressed support for the project?
 - Pacoima Beautiful, Fernandéño Tataviam Band of Mission Indians, San Jose Elementary School (LAUSD), Los Angeles County Bike Coalition, Los Angeles Walks, Streets are for Everyone, City Council District 7
- Have you received a letter of concurrence from the municipality (if needed)
 - Yes. Led by the City of Los Angeles
- Have you received a letter of concurrence from the Flood Control District (if needed)
 - Yes
- Have you yet engaged the appropriate vector control district about the project concept?
 - Yes



Project Details- Existing Conditions

Existing Condition



Existing Conditions

- Infiltration Rate: 3.0 in/hr
- Depth to Groundwater: > 100 ft BGS
- Owner: City of Los Angeles

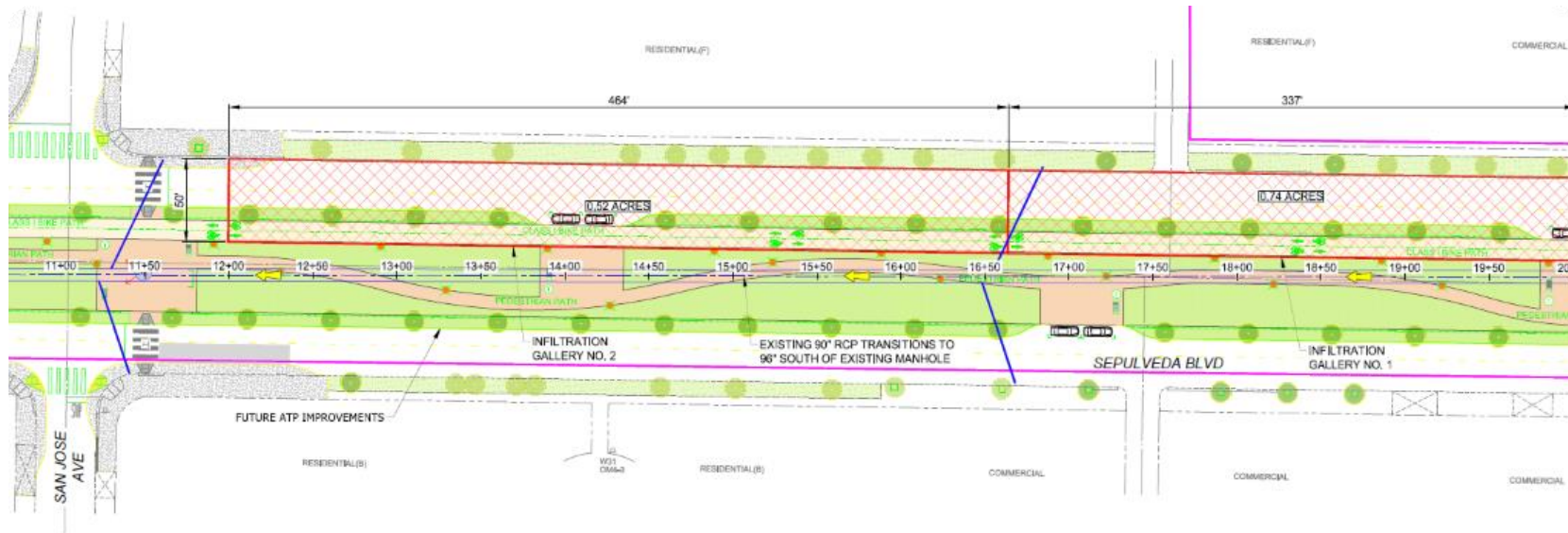
*Feasibility, Geotechnical Investigation, and Stormwater Capture review done

*Alternative footprint sizes and diversion rates examined



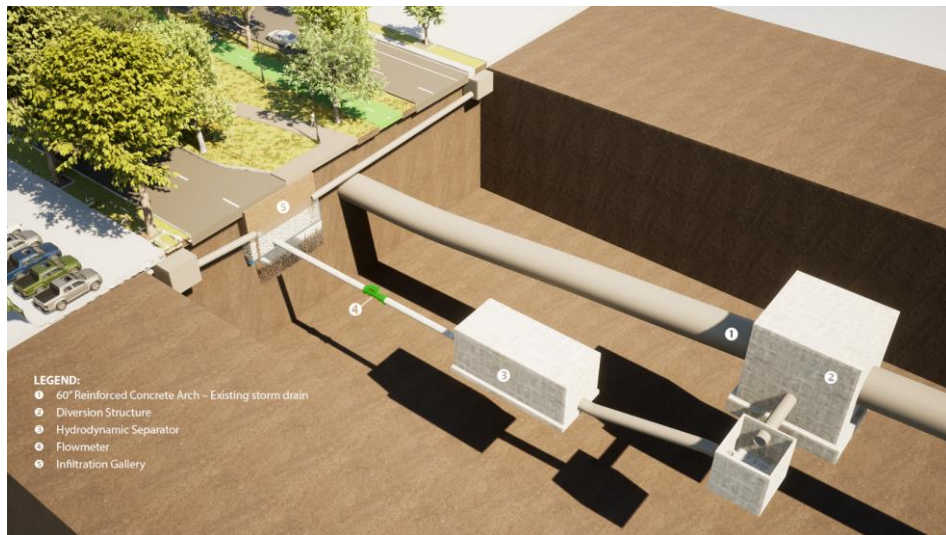


Project Details- Site Plan

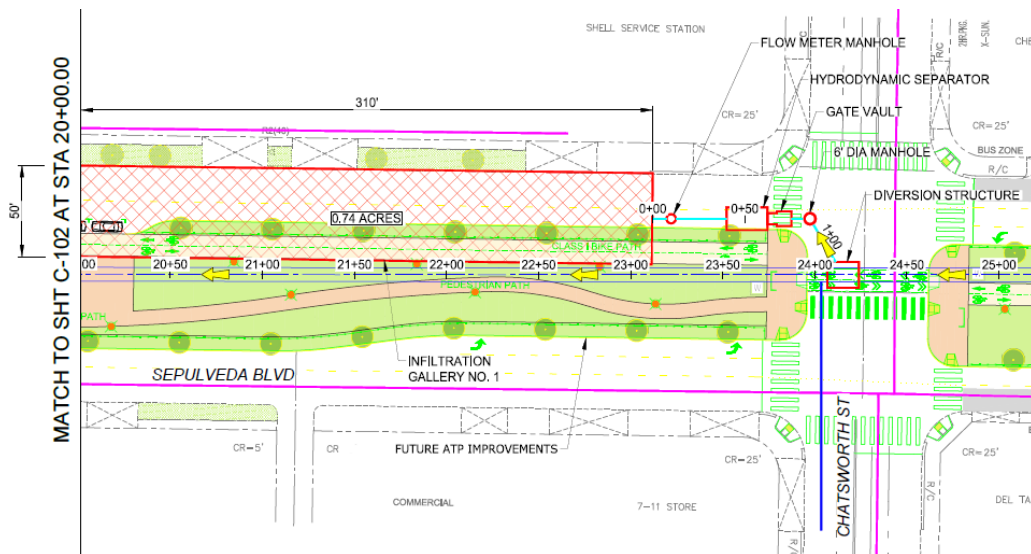


INFILTRATION GALLERY PLAN

1" = 40'

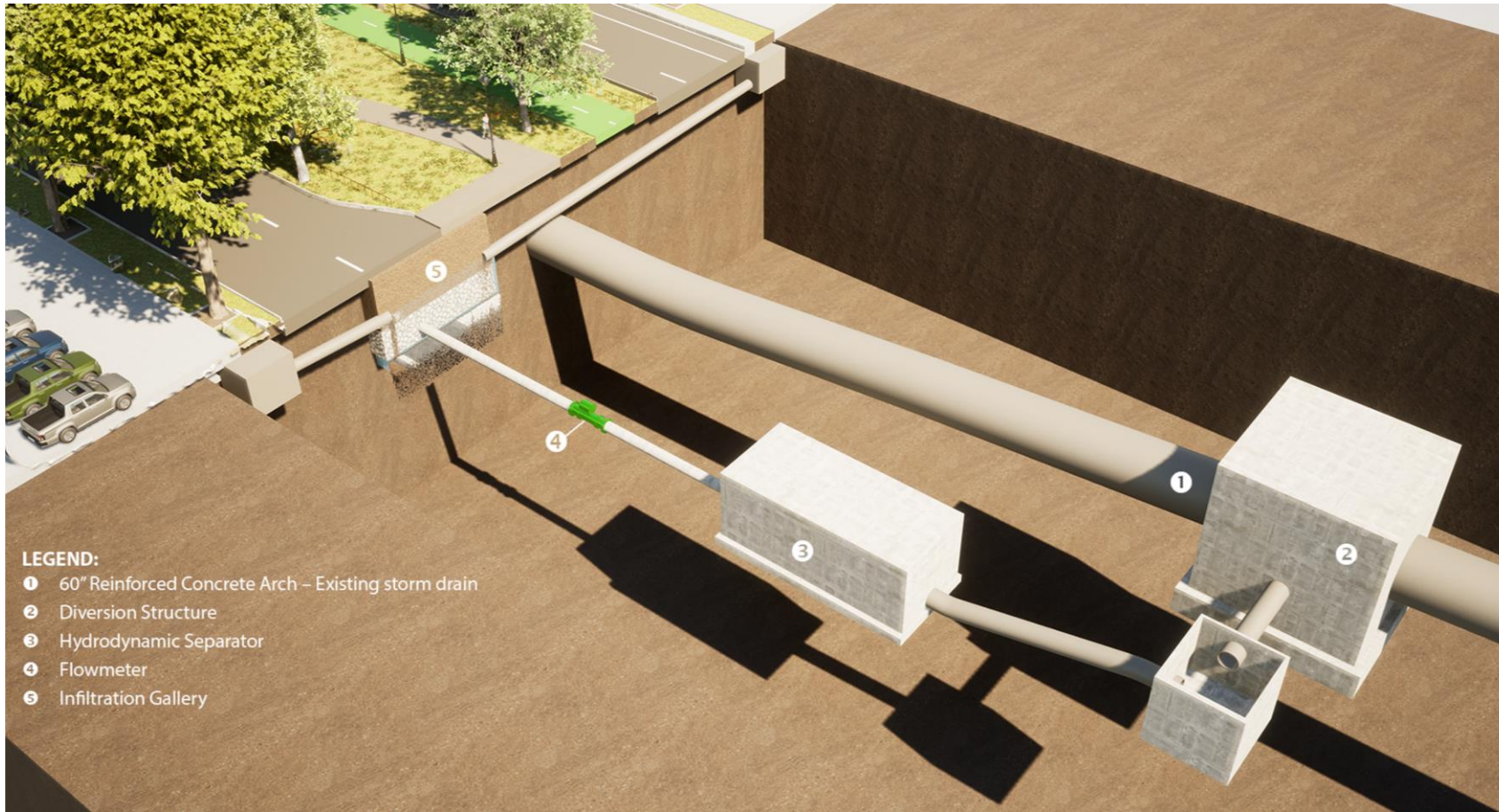


- LEGEND:
- 1 60" Reinforced Concrete Arch - Existing storm drain
 - 2 Diversion Structure
 - 3 Hydrodynamic Separator
 - 4 Flowmeter
 - 5 Infiltration Gallery





Project Details – Schematic Diagram



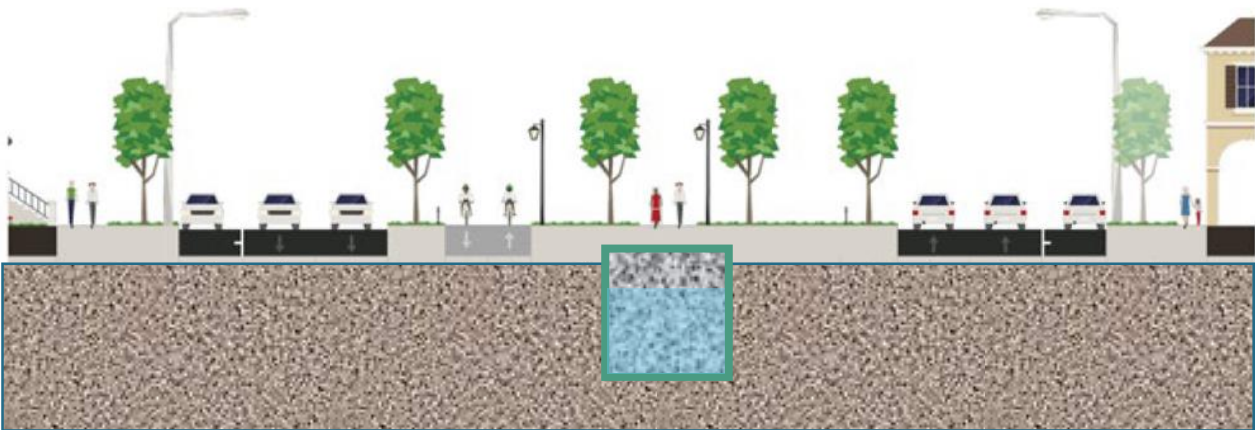
Diversion Rate	Storage Capacity	24-Hour Capacity	Primary Pollutant Reduction (Zinc)	Secondary Pollutant Reduction (Copper)
40 cfs	11.1 ac-ft (3.6 MG)	18.75 ac-ft	92.3% (143 lbs/yr)	91.8% (35 lbs/yr)



Project Details - Benefits



- **Water Quality** improvement in the ULAR by treating stormwater and urban runoff
- **Nature-Based** creation of infiltrating bioretention and native vegetations
- **Park Recreational Enhancements** creating a new median and added bike lanes
- **Reduced Heat Island** native/climate-appropriate vegetation and 597 new shade trees throughout the corridor. Removes 18 acres of impervious surfaces





Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Feasibility Study, Geotechnical Investigation	\$234,396	07/2022
Design	Environmental Planning (CEQA/NEPA) and Permitting, Public Outreach during design, Final Design (30/60/90/100), Project Management	\$6,374,246	06/2025
Bid/Award	Bid and award for construction	\$939,404	12/2025
Construction	Construction capital costs, survey, administration and design support, construction management	\$38,514,953	06/2028
TOTAL		\$46,062,999	

Annualized Costs

Maintenance Cost:	\$249,000
Operation Cost:	\$50,000
Monitoring Cost:	\$50,000
Project Life Span:	50

Life-Cycle Costs

Life-Cycle Cost for Project:	\$54,436,870
Annualized Cost for Project:	\$2,268,780



Funding Request

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$1,593,563	Design	Environmental Planning (CEQA) and Permitting, Community Outreach, Agency Project Management, and Professional Design Services (30/60/90/100)
2	\$1,593,560	Design	Environmental Planning (CEQA) and Permitting, Community Outreach, Agency Project Management, and Professional Design Services (30/60/90/100)
2	\$469,702	Bid/Award	Bid and award for construction
3	\$6,452,492	Construction	Construction capital costs, construction administration, and agency management
4	\$6,402,492	Construction	Construction capital costs, construction administration, and agency management
5	\$6,402,492	Construction	Construction capital costs, construction administration, and agency management
TOTAL	\$22,914,301		

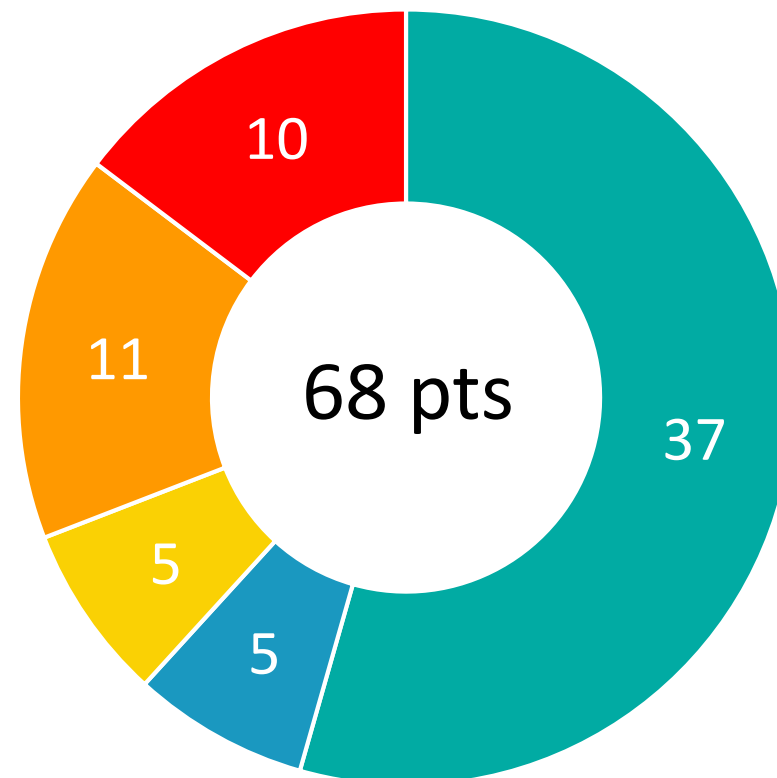
- Cost Share = \$22,914,302 (Caltrans ATP Cycle 5) - **>50%**
- Future funding requests
 - \$349,000 for Operation & Maintenance – Year 6 and beyond



Score as confirmed by the Scoring Committee

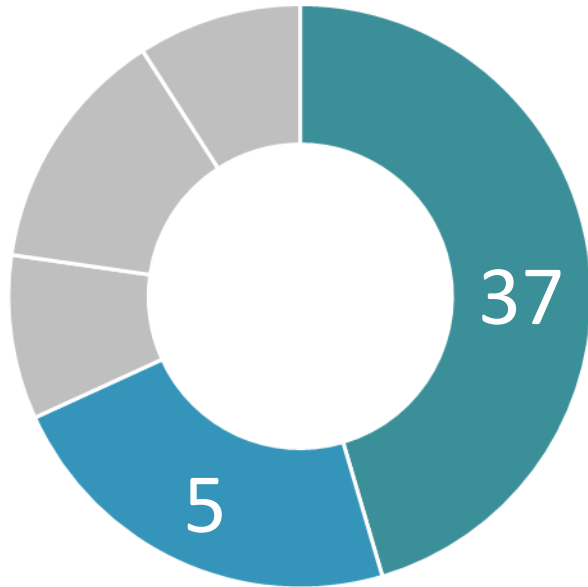
The Scoring Committee confirmed this score on 17 Oct 2022.

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





Water Quality & Water Supply Benefits

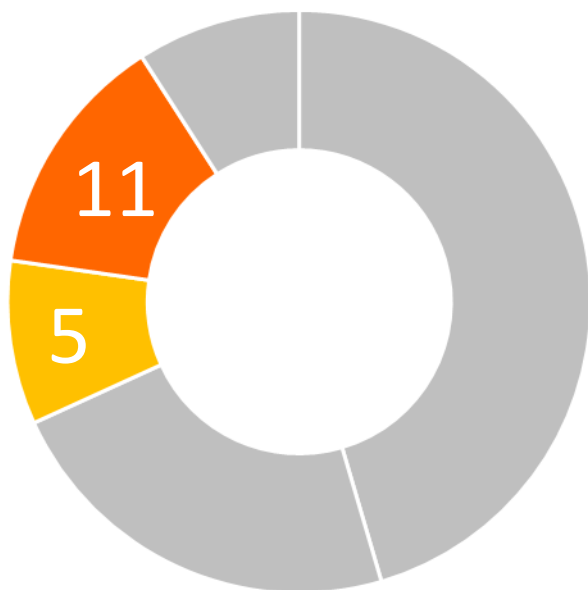


The Scoring Committee confirmed this score on 17 Oct 2022

- **Primary Mechanisms**
 - Runoff/pollutant capture
 - Infiltration
- **Wet weather project**
- **Tributary Area: 386 acres**
- **24 Hours Capacity: 18.75 ac-ft**
- **Pollutant Load Reduction**
 - Primary Pollutant (Zinc) – **92.3% (143 lbs-annual avg)**
 - Secondary Pollutant (Copper) – **91.8% (35 lbs-annual avg)**
- **Average Annual Capture for Water supply: 124.3 ac-ft**
- **Water Supply Use :**
 - **Groundwater recharge**
- **Water Supply Cost Effectiveness: \$18,259 per ac-ft**



Community Investment Benefits and Nature Based Solutions

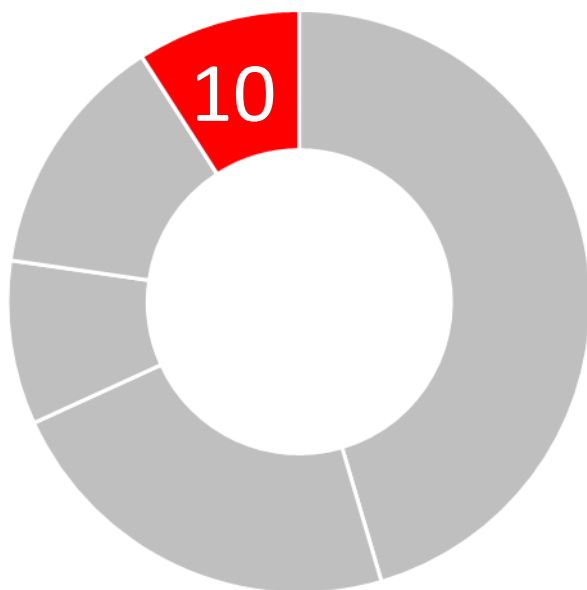


The Scoring Committee confirmed this score on 17 Oct 2022

- **Community Investment Benefits**
 - Creation of parks and wetlands
 - Enhanced recreational opportunities
 - Reduced heat island effect and increased shade
 - Increase the number of trees and vegetation
- **Nature Based Solutions**
 - Project creates surface bioretention basins to mimic natural hydrology and infiltration
 - Post construction plans include native/climate-appropriate landscaping and 597 additional trees
 - Removes 18 acres of impervious area



Leveraging Funds and Community Support



The Scoring Committee confirmed this score on 17 Oct 2022

- Leveraging Funds
 - \$22.9M – Caltrans ATP Cycle 5
- Community Support
 - City of Los Angeles to continue to lead an active community outreach effort
 - Strong, local, community-Based Support
 - Pacoima Beautiful
 - Fernandeno Tataviam Band of Mission Indians
 - San Jose Elementary School (LAUSD)
 - Monroe Community of Schools
 - Providence Holy Cross Medical Center & Facey Medical Group
 - LA County Bicycle Coalition
 - Los Angeles Walks
 - Streets are for Everyone
 - Los Angeles City Council District 7
 - ATP Support Letters
 - Community engagement meetings and feedback

Ana Tabuena-Ruddy, PLA
City of Los Angeles, StreetsLA

Merrill Taylor, PE
Craftwater Engineering, Inc

Questions?



Eagle Rock Boulevard: A Multi-Modal Stormwater Capture Project

Funding Program - Infrastructure Program

Fiscal Year 2023-2024

Upper Los Angeles River Watershed

Project Lead: Ana Tabuena-Ruddy, PLA

Department of Public Works, StreetsLA

City of Los Angeles

Presenter: Merrill Taylor (Craftwater Engineering)

Previously Awarded TRP? - No



Project Overview

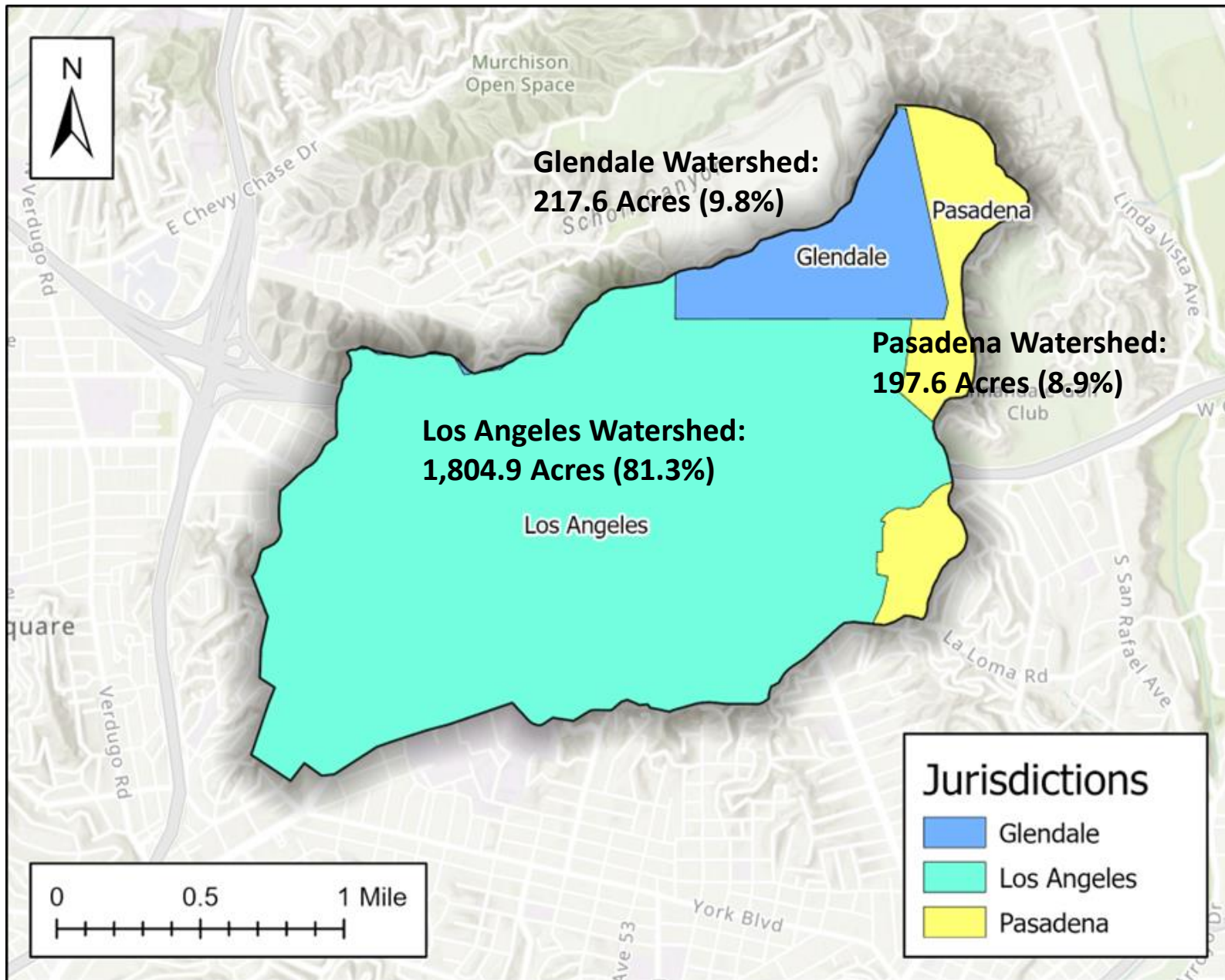
Regional dry-weather & biofiltration at Eagle Rock Blvd between Westdale Avenue and York Boulevard to complement 2.7 miles of ATP improvements

- **Primary Objective:** Increase corridor safety and transportation options while improving WQ within the Upper LA River through nature-based stormwater management solutions
- **Secondary Objectives:** Stimulate economic growth & public education
- **Project Status:** SCW funding request for Design, Bid/Award, & Construction
- **Total Funding Requested:** \$7,632,723





Project Location – Watershed Map

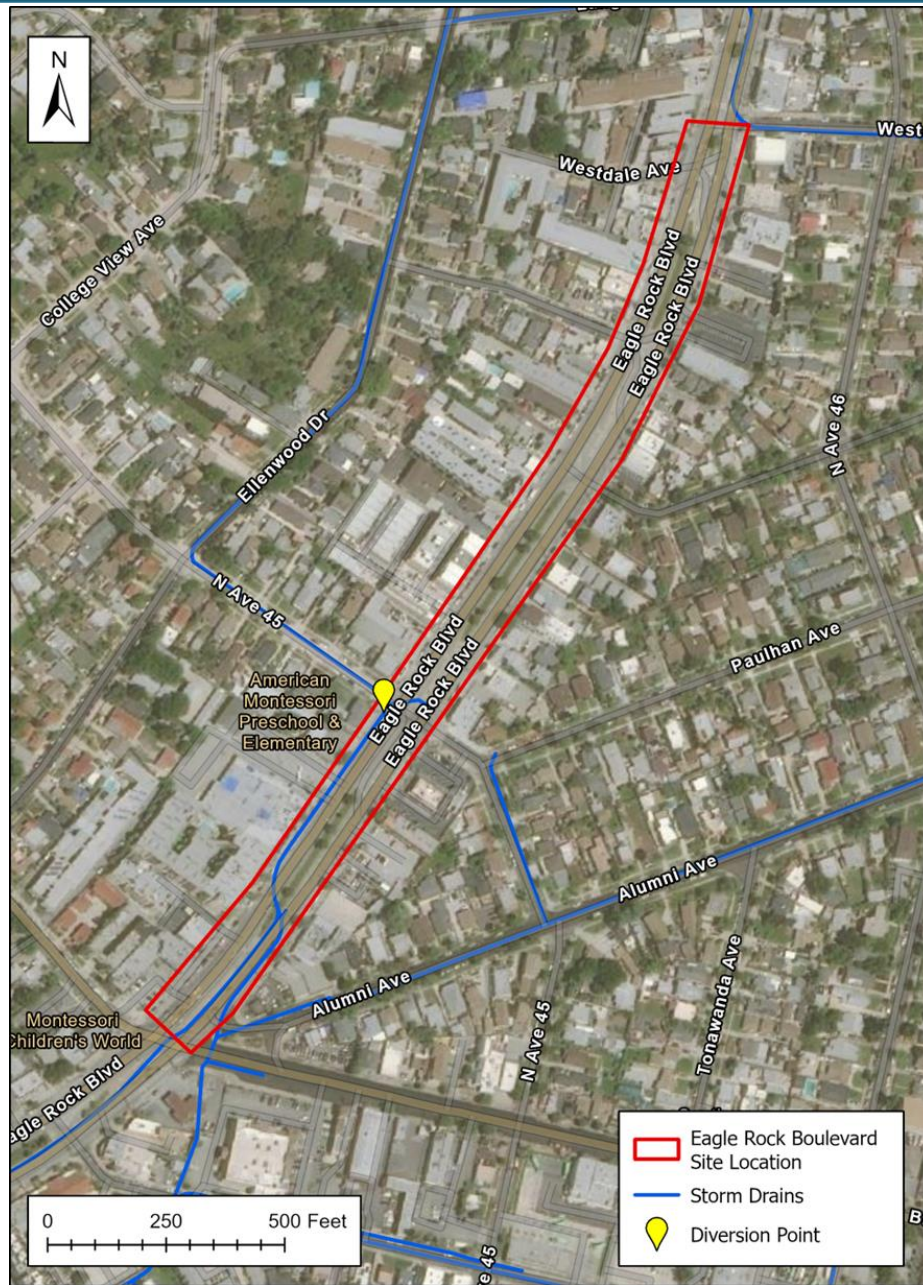
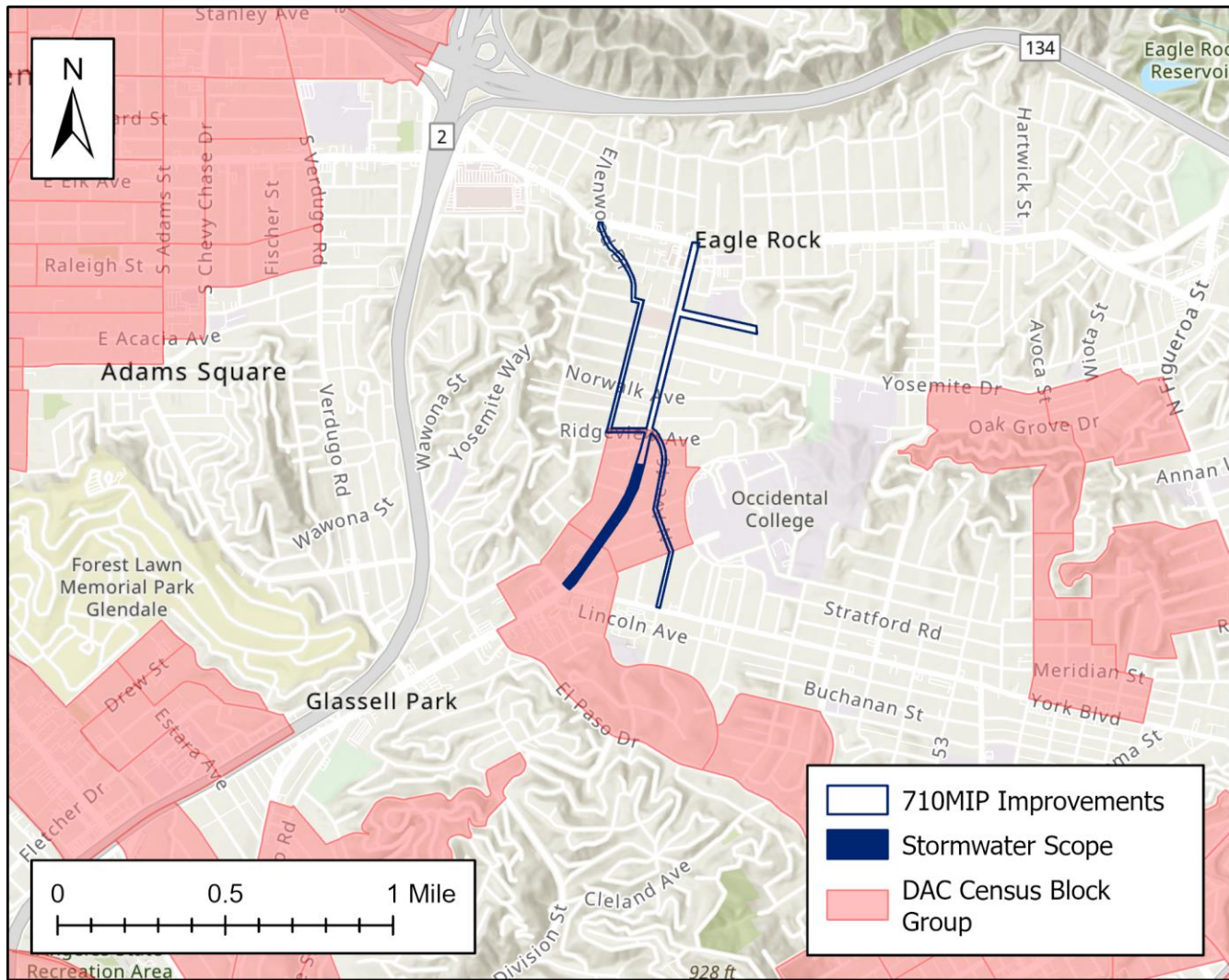


- Capture area jurisdiction:
 - City of Los Angeles
 - City of Glendale
 - City of Pasadena
- Watershed Capture Area:
 - 2,220 acres

Land-use	Area (acres)	% of Impervious
Single Family Residential	279.9	35.7%
Multi-Family Residential	77.6	9.9%
Commercial	99.6	12.7%
Institutional	88.6	11.3%
Industrial	2.4	0.3%
Highways & Interstates	49.4	6.3%
Secondary Roads & Alleys	186.6	23.8%
TOTAL	784	100%



Project Location – Project Area & DAC Communities





Project Background

- Why was the Project Location selected?
 - WQ improvements to ULAR with needed alternate transportation improvement & disadvantaged community support
- How was the Project developed?
 - Corridor layout alternatives, community input, and incorporation of potential stormwater features
- Which regional water management plan includes the proposed project?
 - EWMP – regional BMP capacity in subwatershed 648049
- Description of benefits to municipality/municipalities
 - New bike/walking paths and median to enhance public safety, increased tree canopy and habitat, treat dry-weather flows
- Description of benefits to Disadvantaged Communities
 - Increased pedestrian & bike safety, stimulate economic growth



Partners

- Who are the implementation partners already identified?
 - City of Los Angeles, Department of Public Works, StreetsLA
- What communities or groups have expressed support for the project?
 - The Eagle Rock Association, Temple Beth Israel of Highland Park & Eagle Rock, City Council District 14, LA County Bike Coalition, Los Angeles Walks, Schools
- Have you received a letter of concurrence from the municipality (if needed)
 - Yes. Led by the City of Los Angeles
- Have you received a letter of concurrence from the Flood Control District (if needed)
 - City of LA storm drains, therefore, LACFCD concurrence is **not required**
- Have you yet engaged the appropriate vector control district about the project concept?
 - Yes



Project Details- Existing Conditions

Existing Condition



Existing Conditions

- Dry Weather Flow = 0.089 cfs
- Infiltration Rate: < 0.1 in/hr
- Approximate Depth to Groundwater: 8 to 10 ft BGS
- Owner: City of Los Angeles

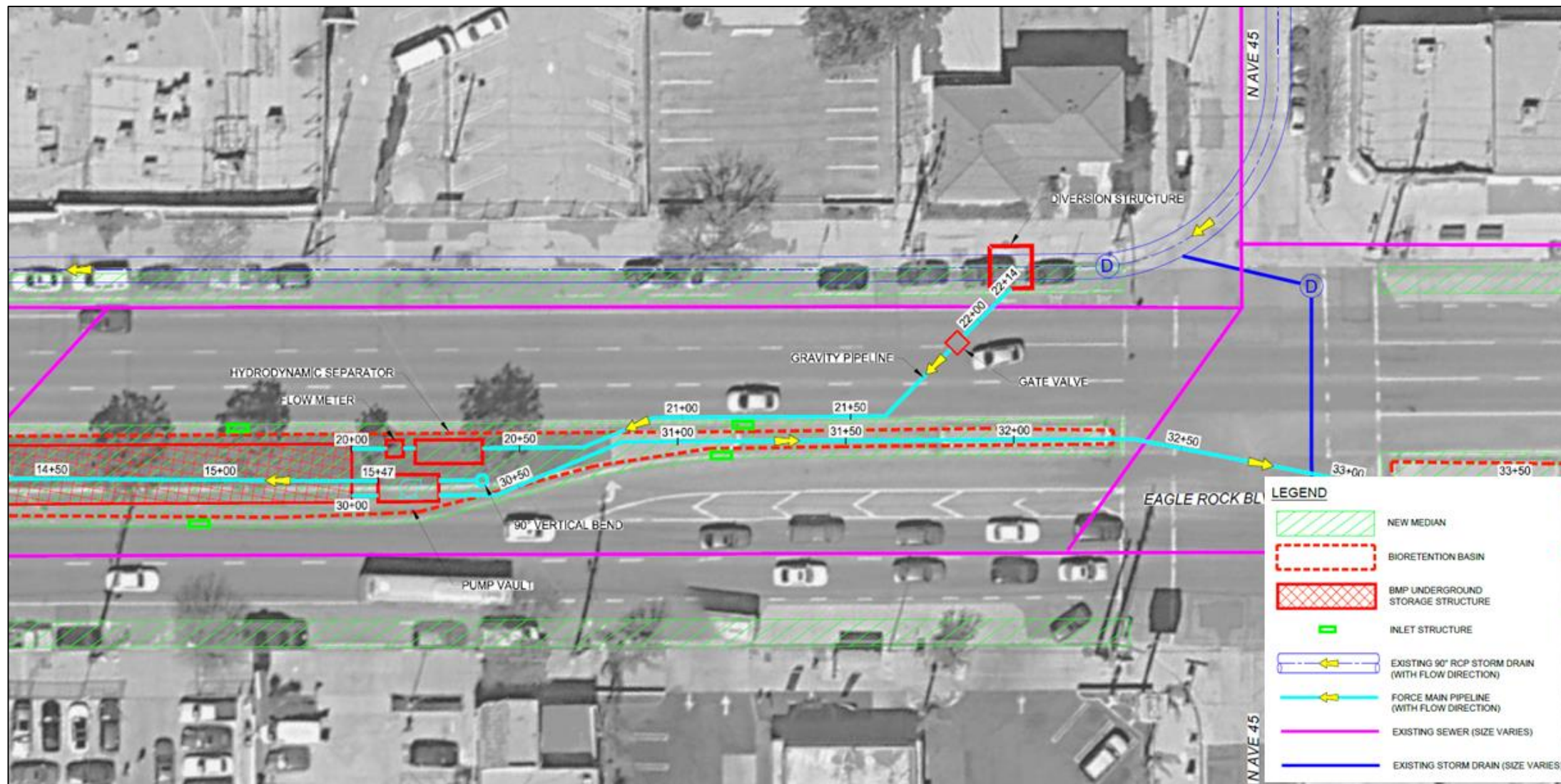
*Feasibility, Geotechnical Investigation, and Stormwater Capture review done

*Alternative footprint sizes and diversion rates examined



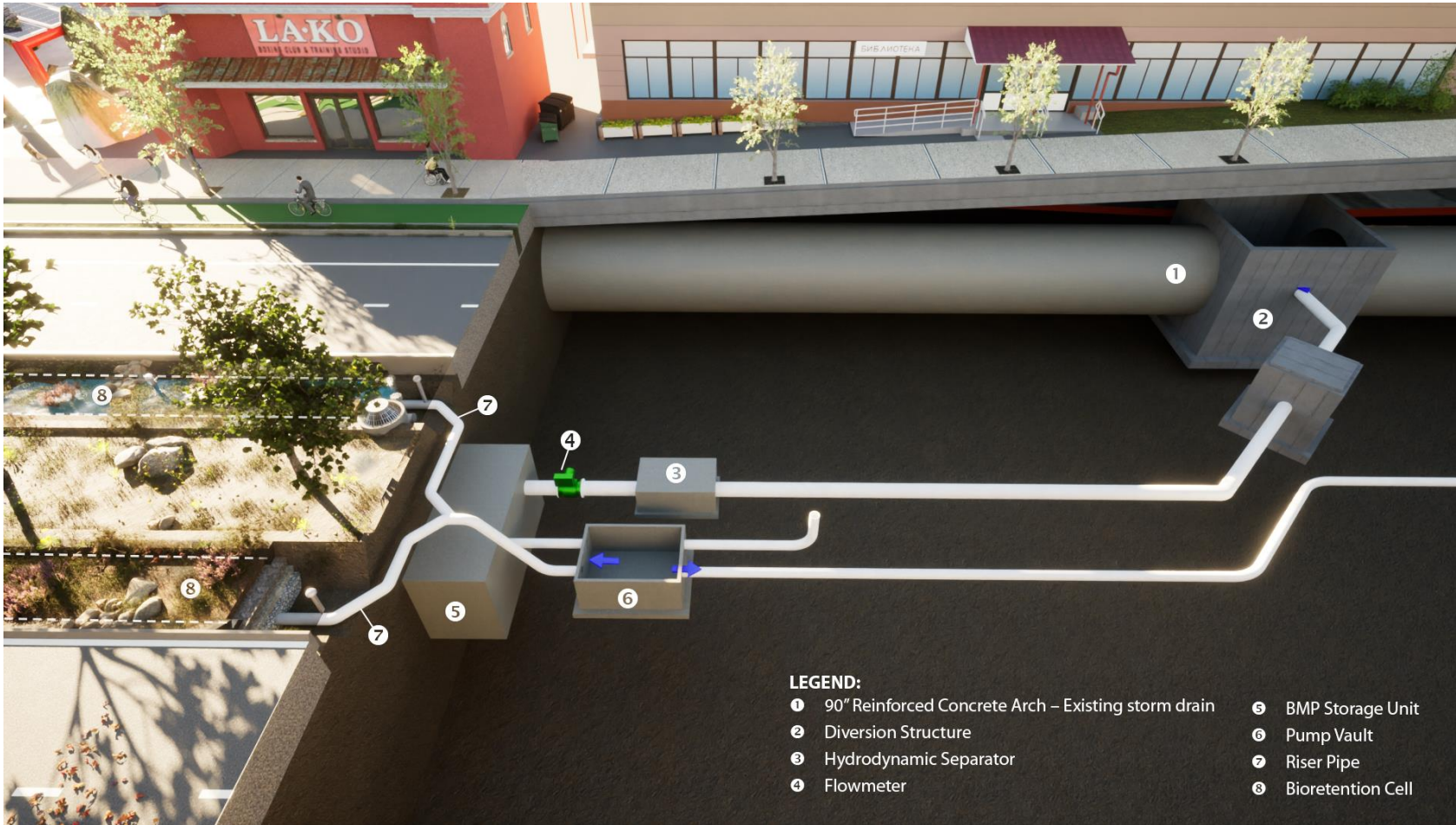


Project Details- Site Plan





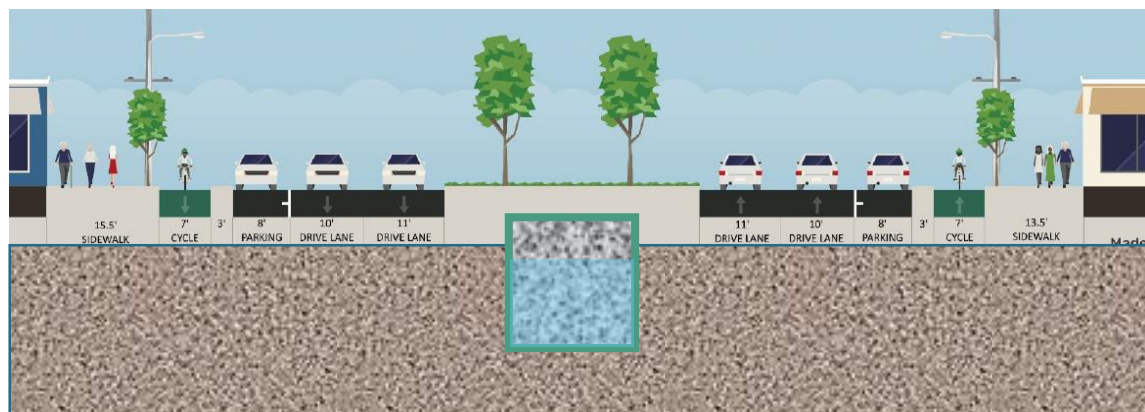
Project Details – Schematic Diagram



Diversion Rate	Storage Capacity	24-Hour Capacity	Primary Pollutant Reduction (Zinc) Dry-Weather	Secondary Pollutant Reduction (Copper) Dry-Weather
10 cfs	1.67 ac-ft (0.5 MG)	1.67 ac-ft	100%	100%



Project Details - Benefits



- **Water Quality** improvement in the ULAR by treating stormwater and urban runoff
- **Nature-Based** creation of filtering bioretention and native vegetation
- **Park Recreational Enhancements** creating a new median and added bike lanes
- **Reduced Heat Island** native/climate-appropriate vegetation and 18 new shade trees throughout the corridor



Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Feasibility Study, Geotechnical Investigation	\$242,477	07/2022
Design	Environmental Planning (CEQA/NEPA) and Permitting, Public Outreach during design, Final Design (30/60/90/100), Project Management	\$2,178,479	12/2024
Bid/Award	Bid and award for construction	\$311,198	06/2025
Construction	Construction capital costs, survey, administration and design support, construction management	\$12,775,780	06/2027
TOTAL		\$15,507,934	

Annualized Costs

Maintenance Cost:	\$137,000
Operation Cost:	\$50,000
Monitoring Cost:	\$25,000
Project Life Span:	50

Life-Cycle Costs

Life-Cycle Cost for Project:	\$20,594,641
Annualized Cost for Project:	\$858,328



Funding Request

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$1,089,238	Design	Environmental Planning (CEQA) and Permitting, Community Outreach, Agency Project Management, and Professional Design Services (30/60/90/100)
2	\$155,599	Bid/Award	Bid and award for construction
3	\$3,206,443	Construction	Construction capital costs, construction administration, and agency project management
4	\$3,181,443	Construction	Construction capital costs, construction administration, and agency project management
TOTAL	\$7,632,723		

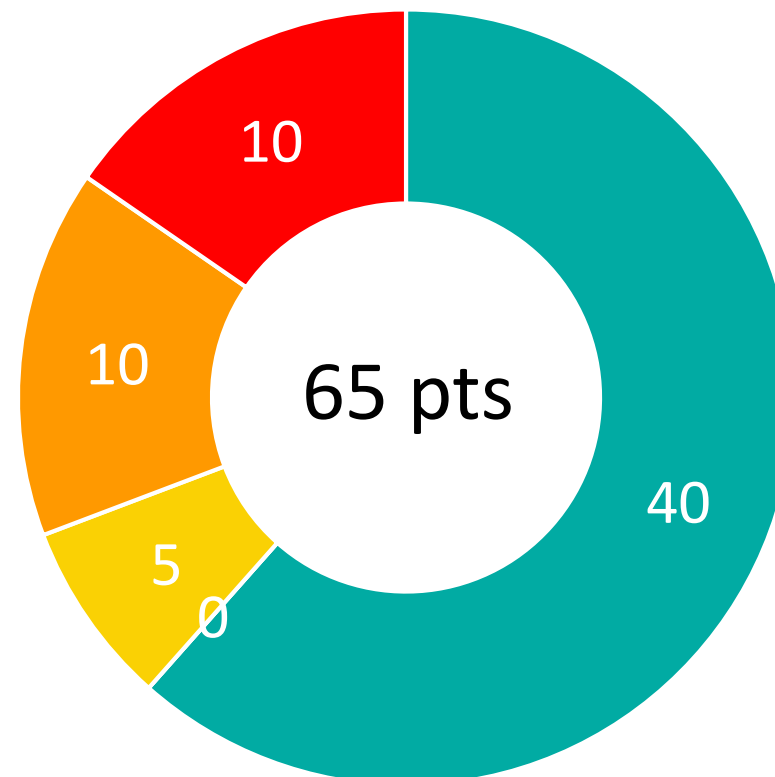
- **Cost Share** = \$16,362,000 (710 North Mobility Improvement Project) - **>50%**
- Future funding requests
 - \$212,000 for Operation & Maintenance – Year 5 and beyond



Score as confirmed by the Scoring Committee

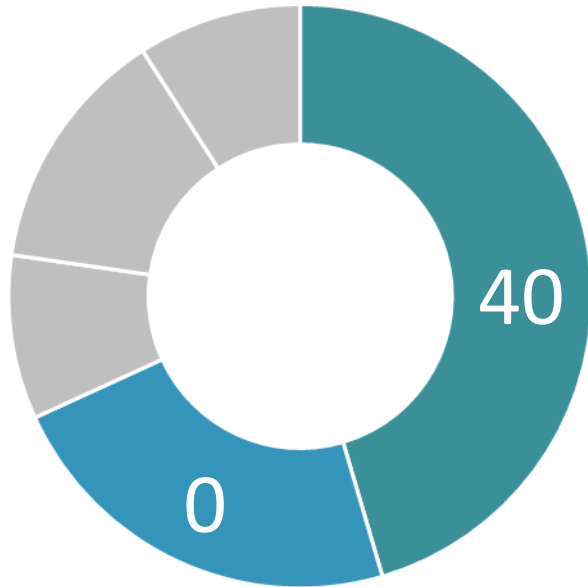
The Scoring Committee confirmed this score on 6 Oct 2022.

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





Water Quality & Water Supply Benefits

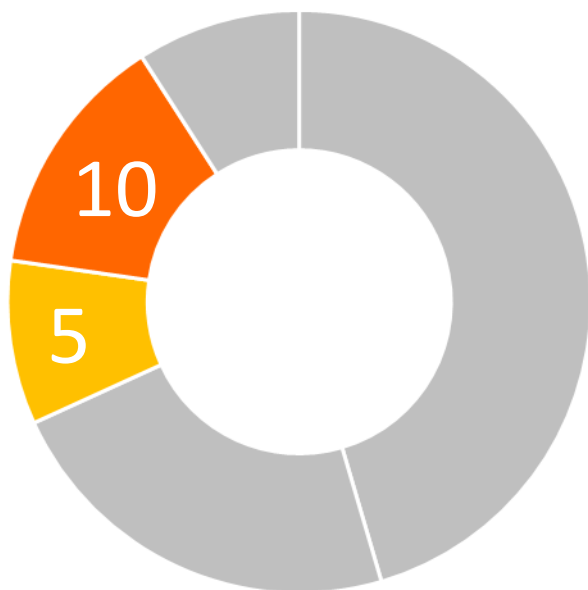


The Scoring Committee confirmed this score on 6 Oct 2022

- **Primary Mechanisms**
 - Runoff/pollutant capture
 - Infiltration
- **Dry weather project**
- Tributary Area: **2,220 acres**
- 24 Hours Capacity: **1.67 ac-ft**
- Pollutant Load Reduction (Dry-Weather)
 - Primary Pollutant (Zinc) – **100%**
 - Secondary Pollutant (Copper) – **100%**
- Average Annual Capture for Water supply: **0 ac-ft**
- Water Supply Use :
 - **N/A**
- Water Supply Cost Effectiveness: **N/A**



Community Investment Benefits and Nature Based Solutions

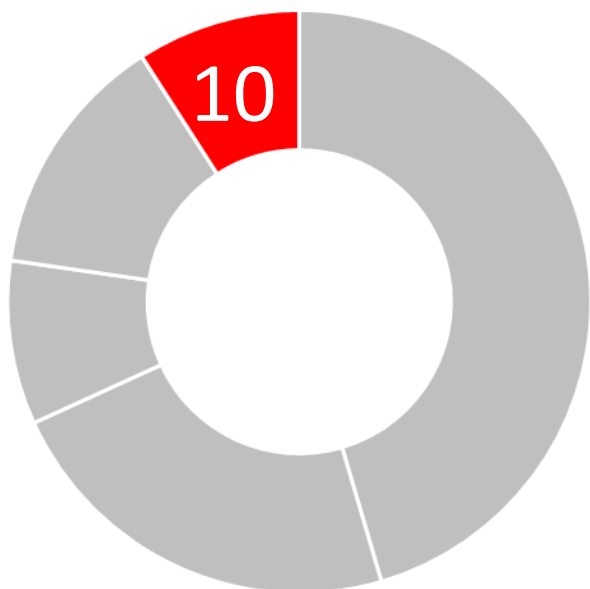


The Scoring Committee confirmed this score on 6 Oct 2022

- **Community Investment Benefits**
 - Creation of parks and wetlands
 - Enhanced recreational opportunities
 - Reduced heat island effect and increased shade
 - Increase the number of trees and vegetation
- **Nature Based Solutions**
 - Project creates surface bioretention basins to mimic natural hydrology
 - Post construction plans include native/climate-appropriate landscaping and 18 additional trees



Leveraging Funds and Community Support



The Scoring Committee confirmed this score on 6 Oct 2022

- Leveraging Funds
 - \$16M from I-710 Mobility Improvement Project
 - 50%+ Cost Share
- Community Support
 - City of Los Angeles to continue to lead an active community outreach effort
 - Strong, local, community-Based Support
 - The Eagle Rock Association
 - Temple Beth Israel of Highland Park and Eagle Rock
 - Los Angeles City Council District 14
 - ATP Support Letters
 - Community engagement meetings and feedback

Ana Tabuena-Ruddy, PLA
City of Los Angeles, StreetsLA

Merrill Taylor, PE
Craftwater Engineering, Inc

Questions?

