



El Dorado Park Regional Stormwater Capture Project

Funding Program - Infrastructure Program

Fiscal Year 2023-2024

Lower San Gabriel River Watershed

Project Lead: City of Long Beach

Presenters: Oliver Galang (Craftwater Engineering)

Previously Awarded TRP? - No



Project Overview

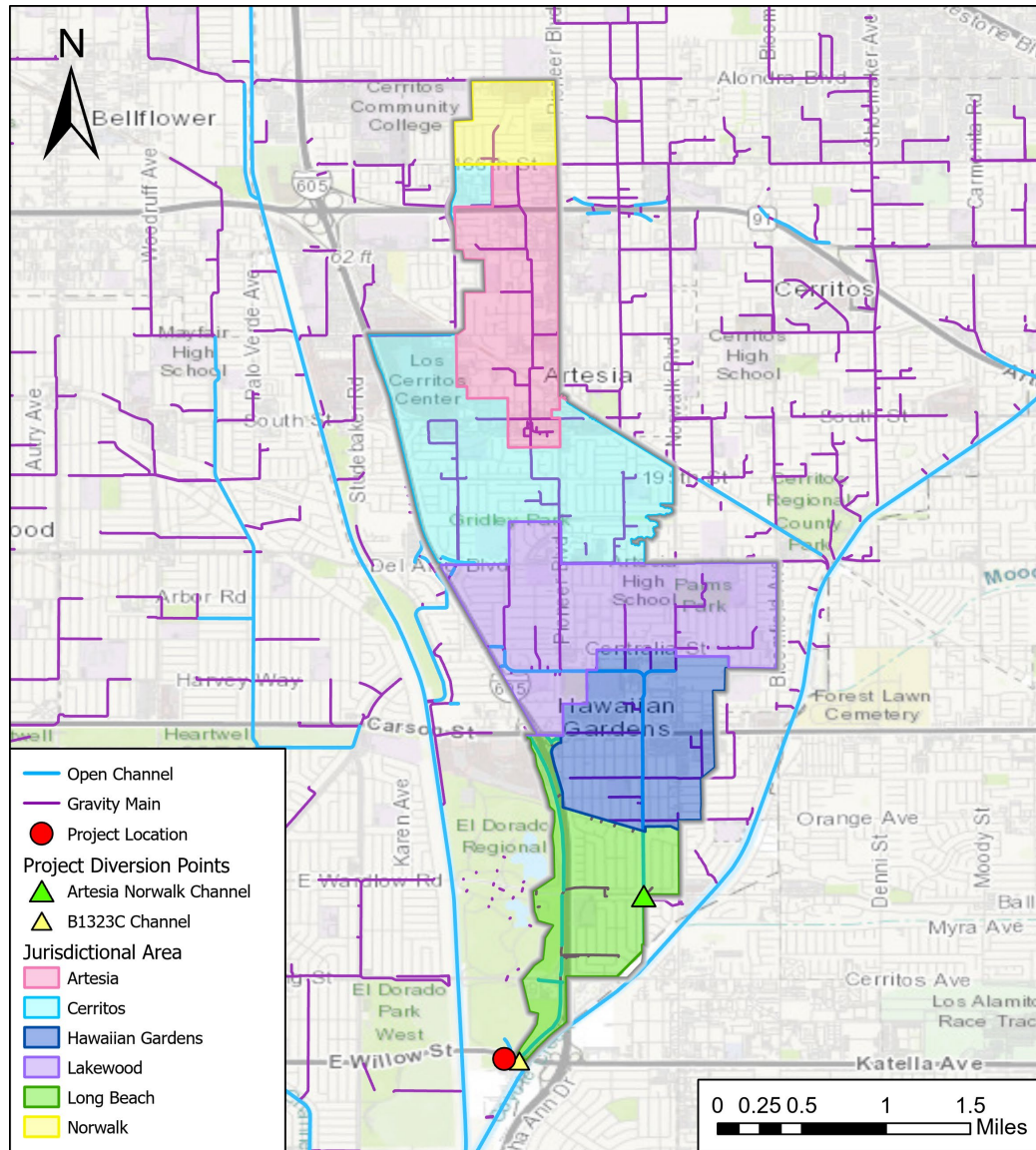
Regional stormwater capture, surface ponds, diversion to sanitary sewer, and filtration facility at El Dorado Regional Park, Construction

- **Primary Objective:** Improve WQ within the Coyote Creek and Lower San Gabriel River watershed through nature-based stormwater management solutions while restoring a park space
- **Secondary Objectives:** Incorporating community desired amenities as appropriate and public education
- **Project Status:** SCW funding request for Construction
- **Total Funding Requested:** \$37,386,870





Project Location – Watershed Map

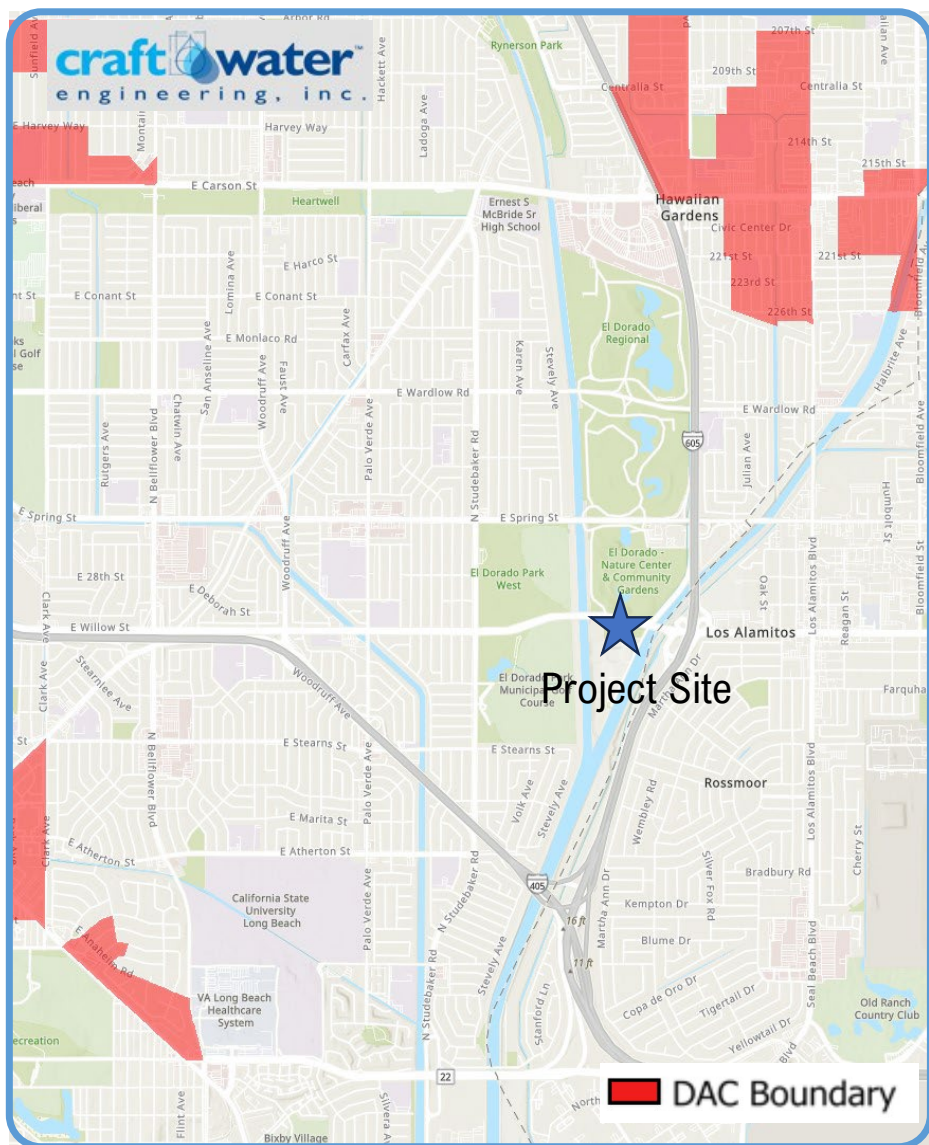


- Capture area jurisdiction:
 - City of Long Beach
 - City of Artesia
 - City of Cerritos
 - City of Hawaiian Gardens
 - City of Lakewood
 - City of Norwalk
- Watershed Capture Area:
 - 2,874 acres

Land-use	Impervious Area (acres)	% of Impervious
Single Family Residential	357.73	25.81%
Multi-Family Residential	124.46	8.98%
Commercial	294.94	21.28%
Institutional	174.36	12.58%
Industrial	61.26	4.42%
Highways and Interstates	96.74	6.98%
Secondary Roads & Alleys	276.51	19.95%
TOTAL	1386.00	100%



Project Location – Project Area & DAC Communities





Project Background

- Why was the Project Location selected?
 - WQ improvements to LSGR near large storm drain infrastructure (Artesia-Norwalk Channel and B-1323C) and sanity sewer connections, and community park improvement
- How was the Project developed?
 - Site diversion and layout alternatives, community input, and incorporation of potential stormwater features and surface restoration considerations
- Which regional water management plan includes the proposed project?
 - LSGR WMP
- Description of benefits to municipality/municipalities
 - Treating dry-weather flows, additional tree cover, enhanced habitat space, and new walking pathways
- Description of benefits to Disadvantaged Communities
 - New and enhanced park facilities



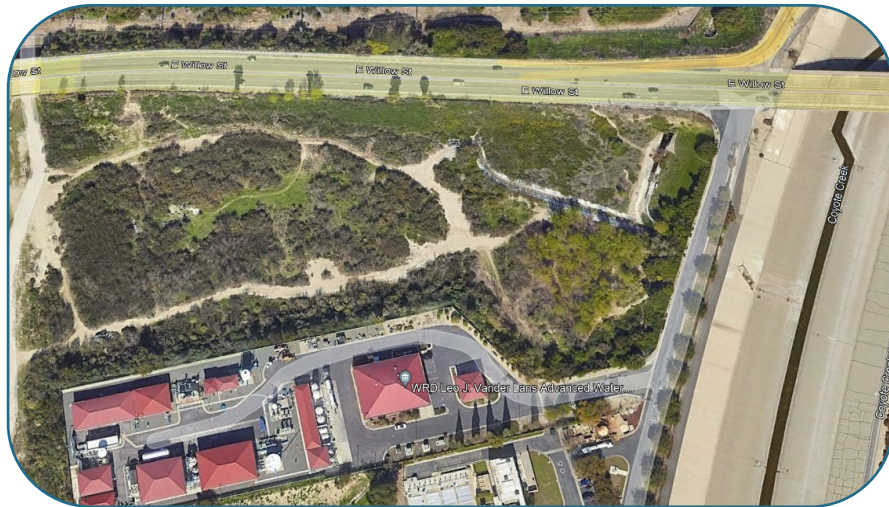
Partners

- Who are the implementation partners already identified?
 - City of Long Beach, Lower San Gabriel River Watershed Management Group
- What communities or groups have expressed support for the project?
 - An outreach event was conducted via Zoom on June 28th in which the project team sought input from the public
- Have you received a letter of concurrence from the municipality (if needed)
 - Yes. Led by the City of Long Beach
- 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

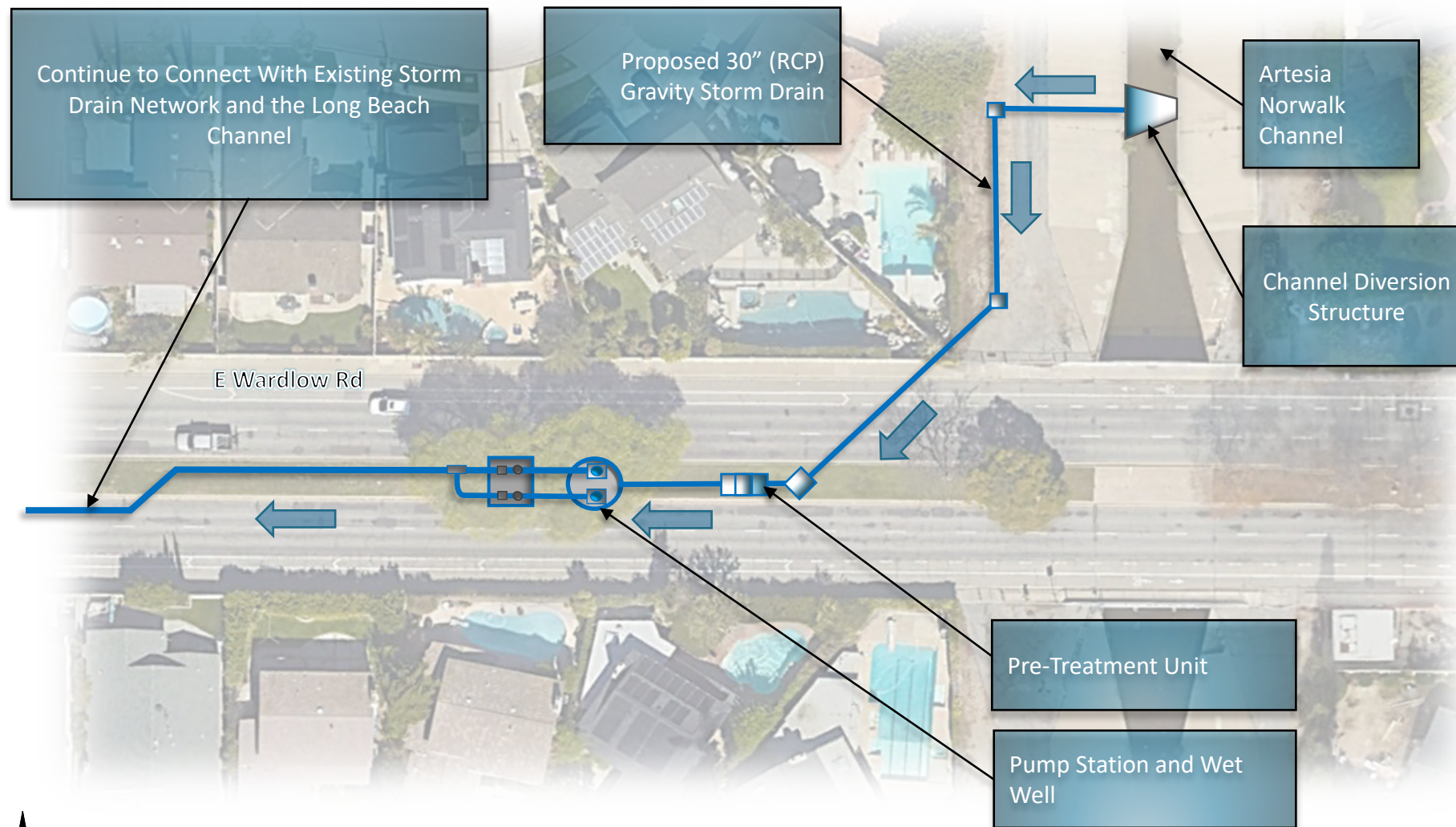
- 85th Percentile Peak Flow = 96.3 cfs (Artesia Norwalk Channel) and 8.6 cfs (B-1323C)
- 85th Percentile Surface Runoff = 58.5 ac-ft
- Infiltration Rate: N/A
- Depth to Groundwater: 12 ft
- Owner: City of Long Beach

*Feasibility, Stormwater Capture review, and 60% design done

*Alternative footprint sizes and diversion rates examined



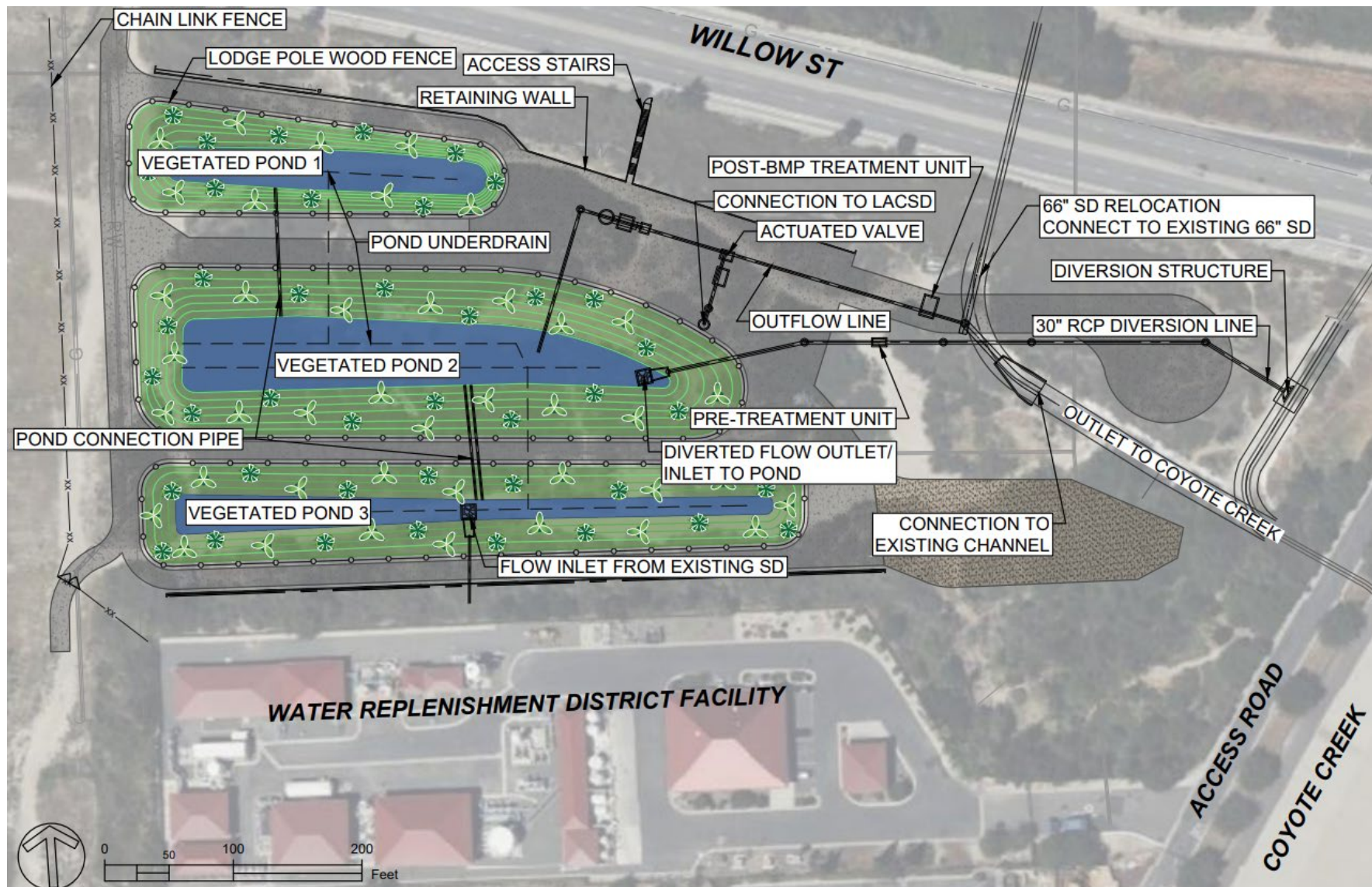
Project Details- Artesia-Norwalk Channel Diversion Site Plan



Artesia-Norwalk Channel Diversion Site Layout Technical Drawing

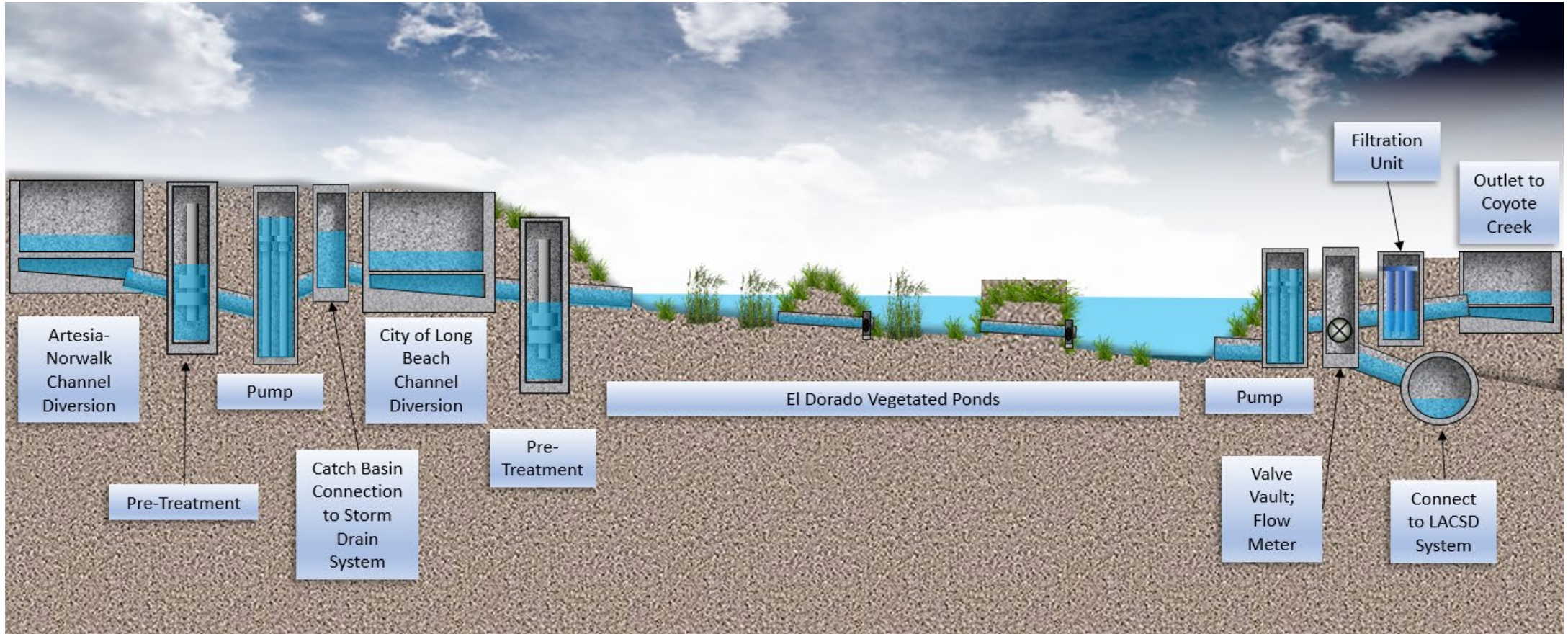


Project Details- Vegetated Ponds Site Plan





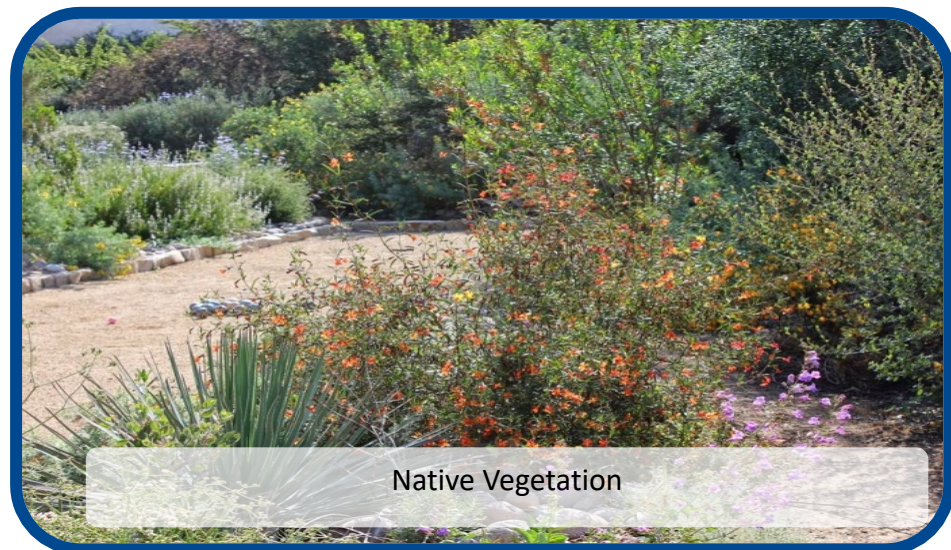
Project Details – Schematic Diagram



Diversion Rate	Storage Capacity	Dry Weather Flow Rate
40 cfs (2 spots)	10.3 ac-ft (3.36 MG)	0.04 cfs



Project Benefits



- **Water Quality** improvement in the LSGR by treating stormwater and urban runoff
- **Nature-Based** creation of filtering bioretention and native vegetation
- **Park Recreational Enhancements**
New network of pathways between the ponds
- **Reduced Heat Island** native vegetation and 34 new shade trees throughout the park



Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Feasibility Study	\$500,719	12/2029
Design	Environmental Planning (CEQA) and Permitting, Public Outreach during design, Final Design (30/60/90/100), Project Management	\$1,293,490	03/2024
Construction	Construction capital costs, survey, administration and design support, construction management	\$37,386,870	09/2026

Annualized Costs

Maintenance Cost:	\$218,000
Operation Cost:	\$50,000
Monitoring Cost:	\$50,000
Project Life Span:	50

Life-Cycle Costs

Life-Cycle Cost for Project:	\$45,980,320.43
Annualized Cost for Project:	\$1,916,333.70



Funding Request

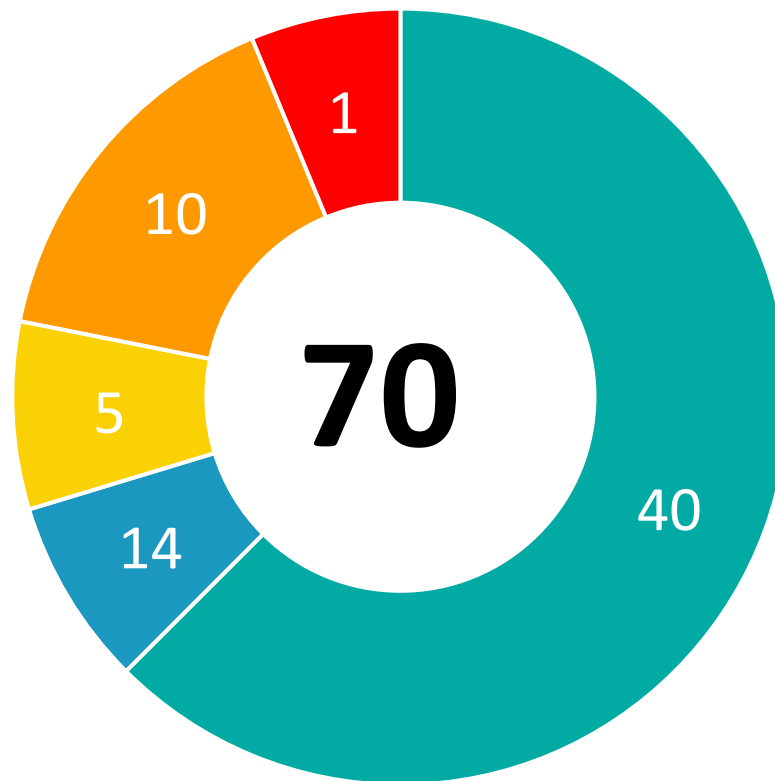
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$9,346,718	Construction	Construction Contract, Year 1 Budget Agency Project Management, Year 1 Construction Administration, Year 1 Construction Survey and Staking
2	\$9,346,718	Construction	Construction Contract, Year 2 Budget Agency Project Management, Year 2 Construction Administration
3	\$9,346,717	Construction	Construction Contract, Year 3 Budget Agency Project Management, Year 3 Construction Administration
4	\$9,346,717	Construction	Construction Contract, Year 4 Budget Agency Project Management, Year 4 Construction Administration
TOTAL	\$37,386,870		

- **Cost Share = \$0**
- Future funding requests
 - None



Score (Final Scoring Rubric FY2024-25, Scoring Committee)

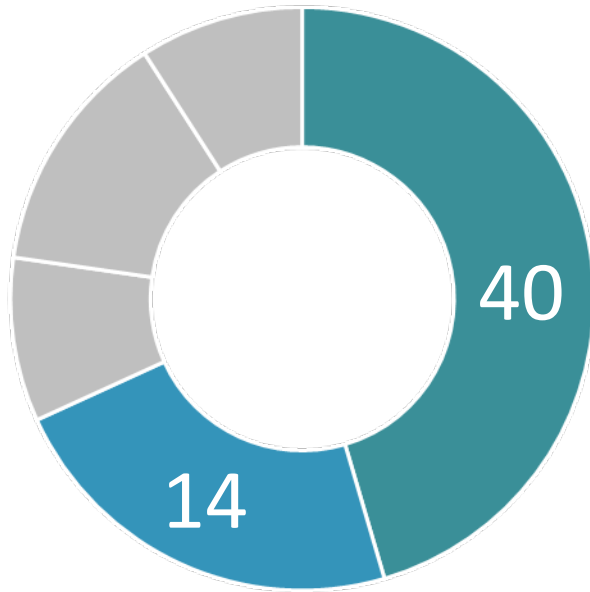
- Water Quality
- Water Supply
- Community Investment Benefits
- Nature Based Solutions
- Leveraged Funds and Community Support



The Scoring Committee confirmed this score on 11/27/23.



Water Quality & Water Supply Benefits

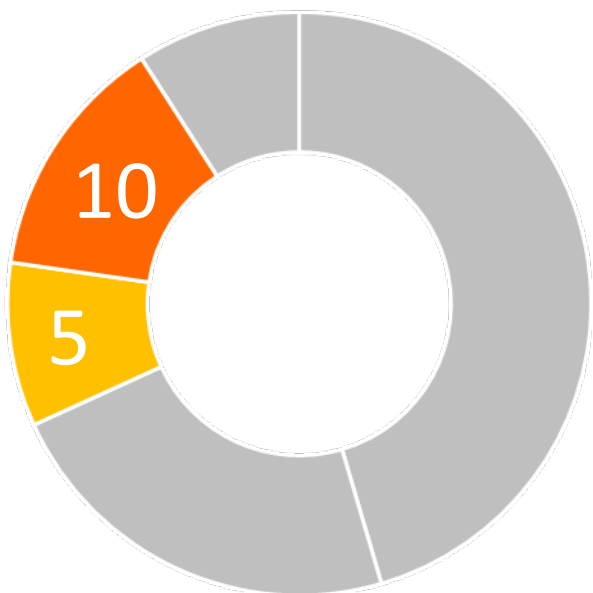


The Scoring Committee confirmed this score on 11/27/23.

- **Primary Mechanisms**
 - Runoff/pollutant capture
 - Filtration
 - Diversion to Sanitary Sewer
- **Dry weather project**
- **Tributary Area: 2,874 acres**
- **Pollutant Load Reduction**
 - Primary Pollutant (Zinc)
- **Average Annual Capture for Water supply: 163 ac-ft**
- **Water Supply Use :**
 - **N/A**
- **Water Supply Cost Effectiveness: \$11,969 per ac-ft**



Community Investment Benefits and Nature Based Solutions



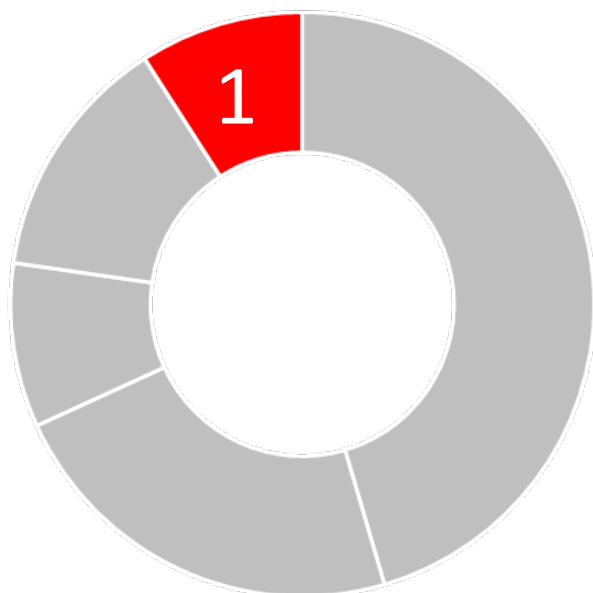
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- Community Investment Benefits
 - Reduced heat island effect and increased shade
 - Increase the number of trees and vegetation
 - Project adds pathways between the ponds
- Nature Based Solutions
 - Post-construction plans include **34 additional native trees**, various native shrubs, native compacted soil, and grasses



Leveraging Funds and Community Support

- Leveraging Funds
 - N/A
- Community Support
 - The City of Long Beach is leading the community outreach effort
 - Public Meeting
 - The project team held a public Zoom meeting to address questions and provide project information to local residents
 - Further Outreach Planned
 - Public Workshops
 - Stakeholder Roundtables



The Scoring Committee confirmed this score on 11/27/23.



Questions?

Mark Bush, PE

Tetra Tech, Inc

Oliver Galang, PE

Craftwater Engineering, Inc