



Finkbiner Park Stormwater Capture Project

Funding Program - Infrastructure Program

Fiscal Year 2023-2024

Upper San Gabriel River Watershed

Project Lead: City of Glendora

Presenter: Oliver Galang (Craftwater Engineering)

Previously Awarded TRP? - No



Project Overview

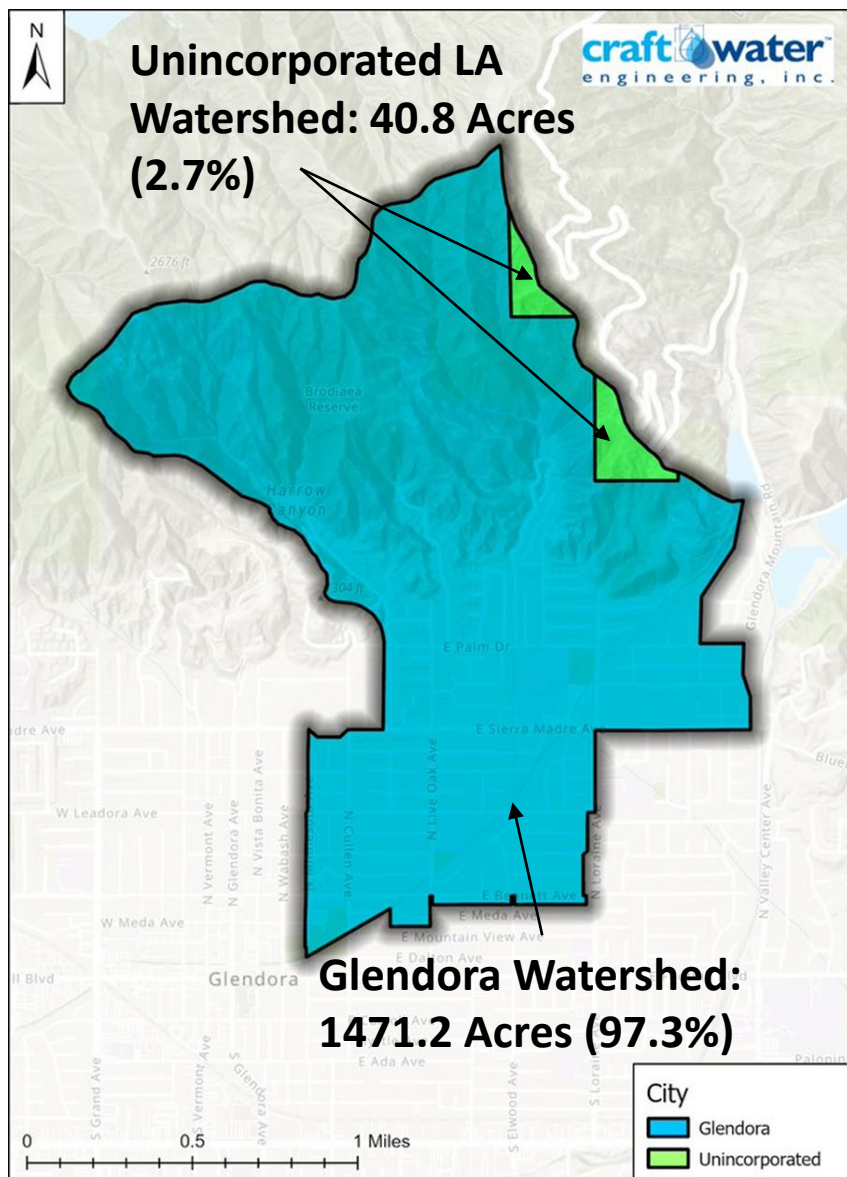
Regional stormwater capture and infiltration facility located at Finkbiner Park beneath the open space of the existing park.

- **Primary Objective:** Improve WQ within the Upper San Gabriel River watershed while incorporating nature-based strategies and maintaining functional recreational use
- **Secondary Objectives:** Restoring the public recreational space and enhancing community amenities at the Park
- **Project Status:** SCW funding request for Construction
- **Total Funding Requested:** \$18,376,246





Project Location – Watershed Map

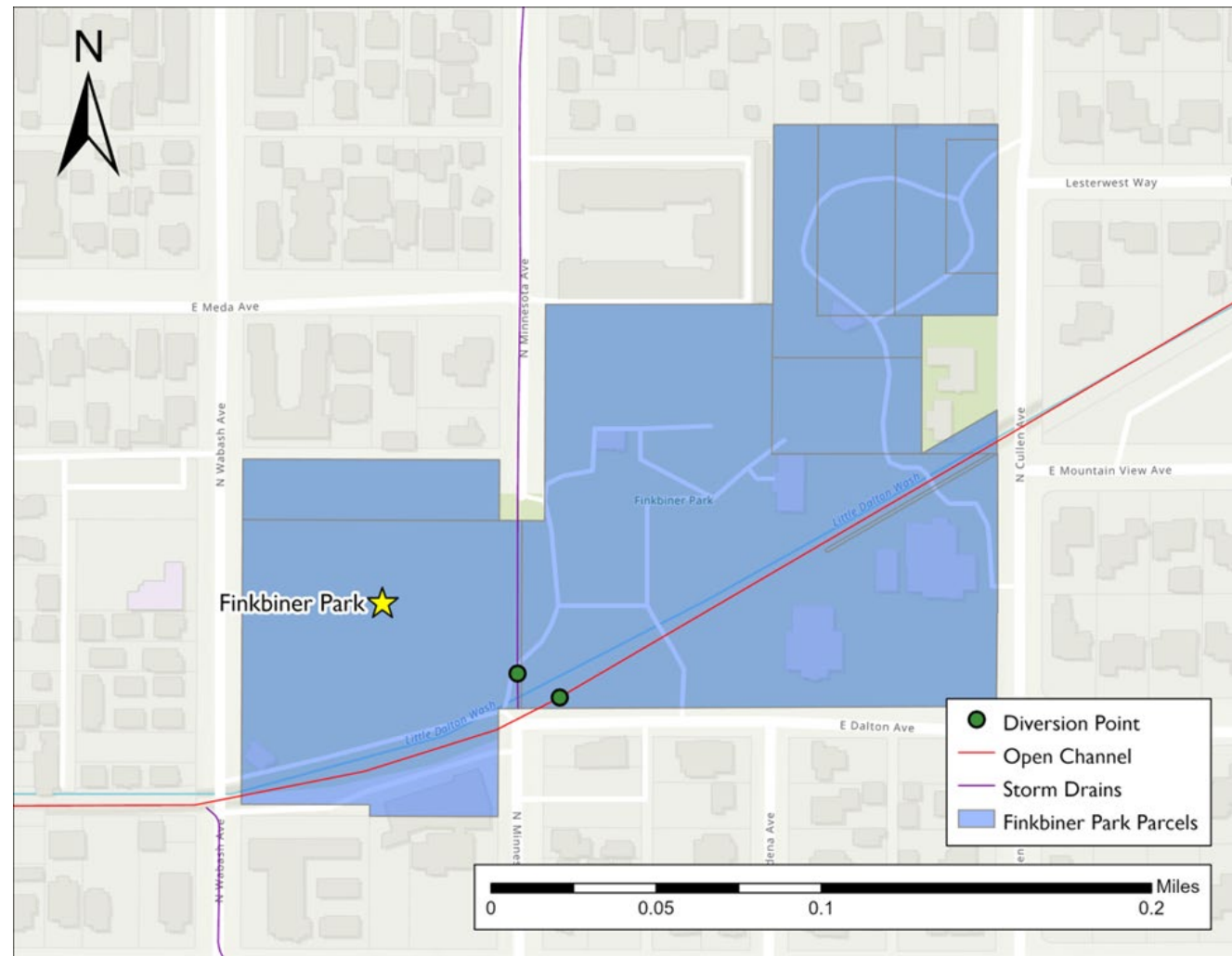
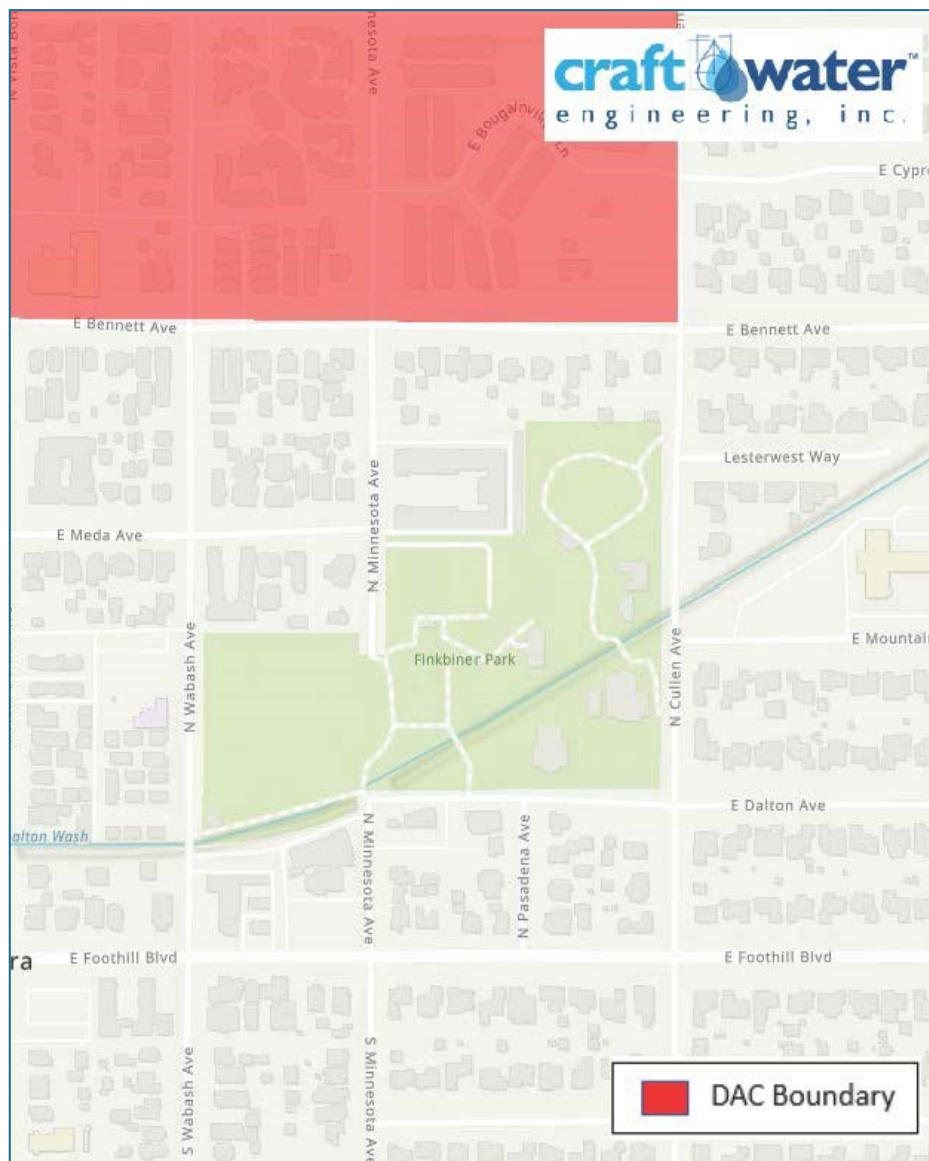


- Capture area jurisdiction:
 - City of Glendora
 - Unincorporated LA
- Watershed Capture Area:
 - 1512 acres

Land-use	Impervious Area (acres)	% of Impervious
Single Family Residential	140.71	56.06%
Multi-Family Residential	8.91	3.55%
Commercial	0.03	0.01%
Institutional	41.09	16.37%
Secondary Roads & Alleys	60.27	24.01%
TOTAL	251.01	100%



Project Location – Project Area & DAC Communities





Project Background

- Why was the Project Location selected?
 - WQ improvements identified in the USGR EWMP, which is adjacent to a storm drain and channel (MTD 1129 and Little Dalton Wash) 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?
 - USGR EWMP
- Description of benefits to municipality/municipalities
 - Improved multi-use fields, recirculation stream, increased tree canopy and habitat, permeable pavement, treating wet- and dry-weather flows
- Description of benefits to Disadvantaged Communities
 - New and enhanced recreational facilities



Partners

- Who are the implementation partners already identified?
 - City of Glendora, Upper San Gabriel Watershed Management Group
- What communities or groups have expressed support for the project?
 - Youth Sports Council, Lassie League Board, Kiwanis Club, Active SGV, and Glendora Community Services Foundation
- Have you received a letter of concurrence from the municipality (if needed)
 - Yes, this project is led by the City of Glendora
- 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 = 17.8 cfs
- 85th Percentile Surface Runoff = 7.28 ac-ft
- Infiltration Rate: 1.2 in/hr
- Approximate Depth to Groundwater: 100 ft
- Owner: City of Glendora



Activities completed

- Feasibility, Geotechnical Investigation, Stormwater Capture review, and 90% design done
- Alternative footprint sizes and diversion rates examined

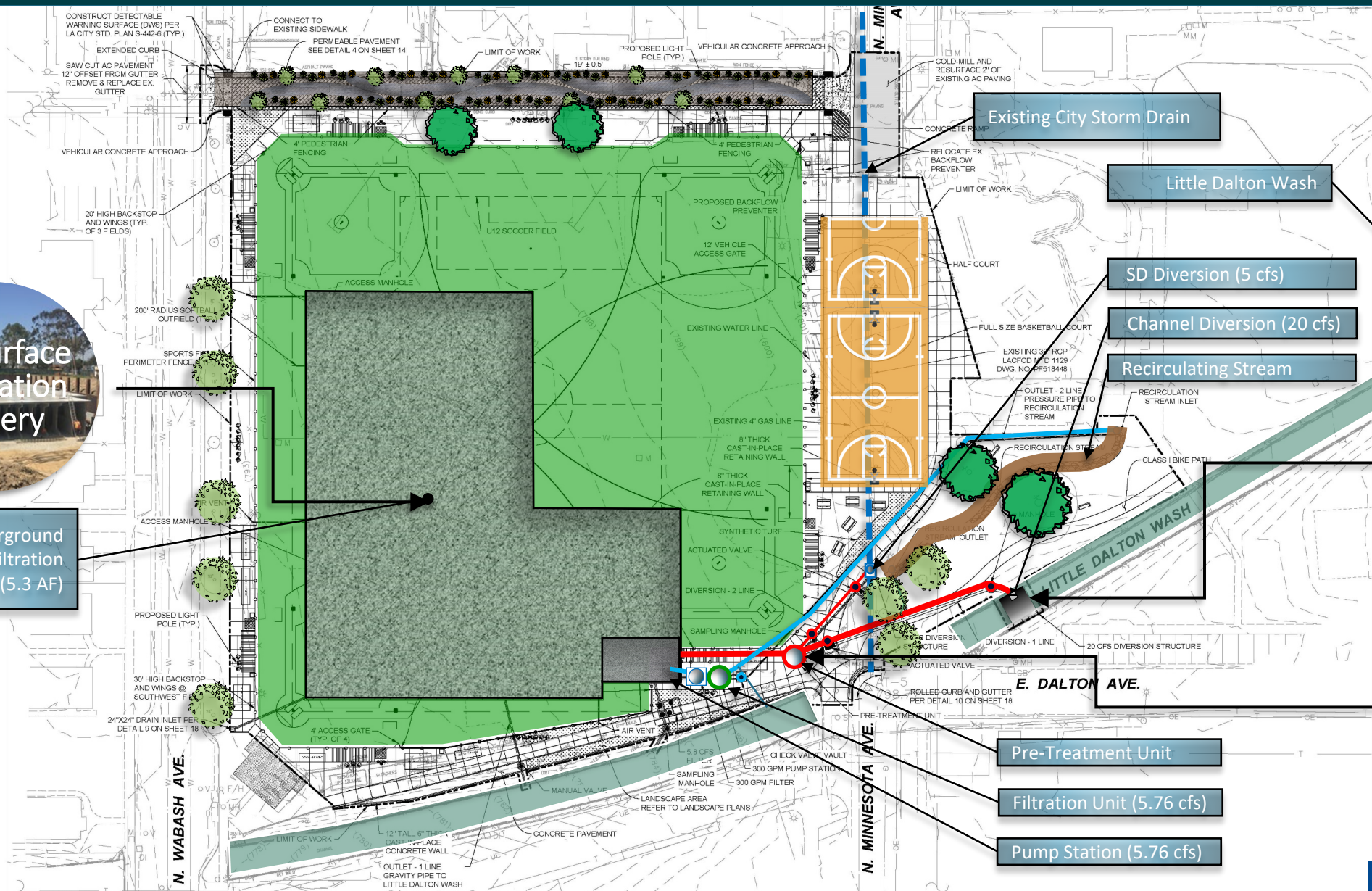


Project Details | SITE PLAN



Subsurface
Infiltration
Gallery

Underground
Storage/Infiltration
Reservoir (5.3 AF)



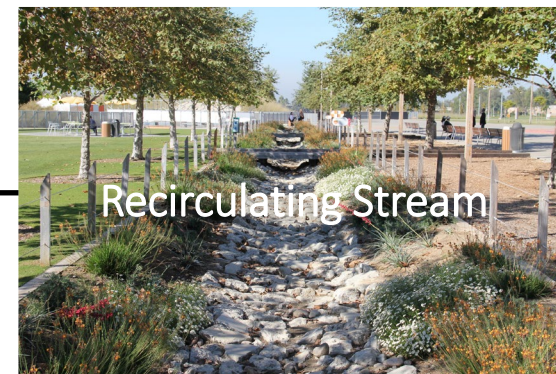
Channel
Diversion



Pre-Treatment
Unit

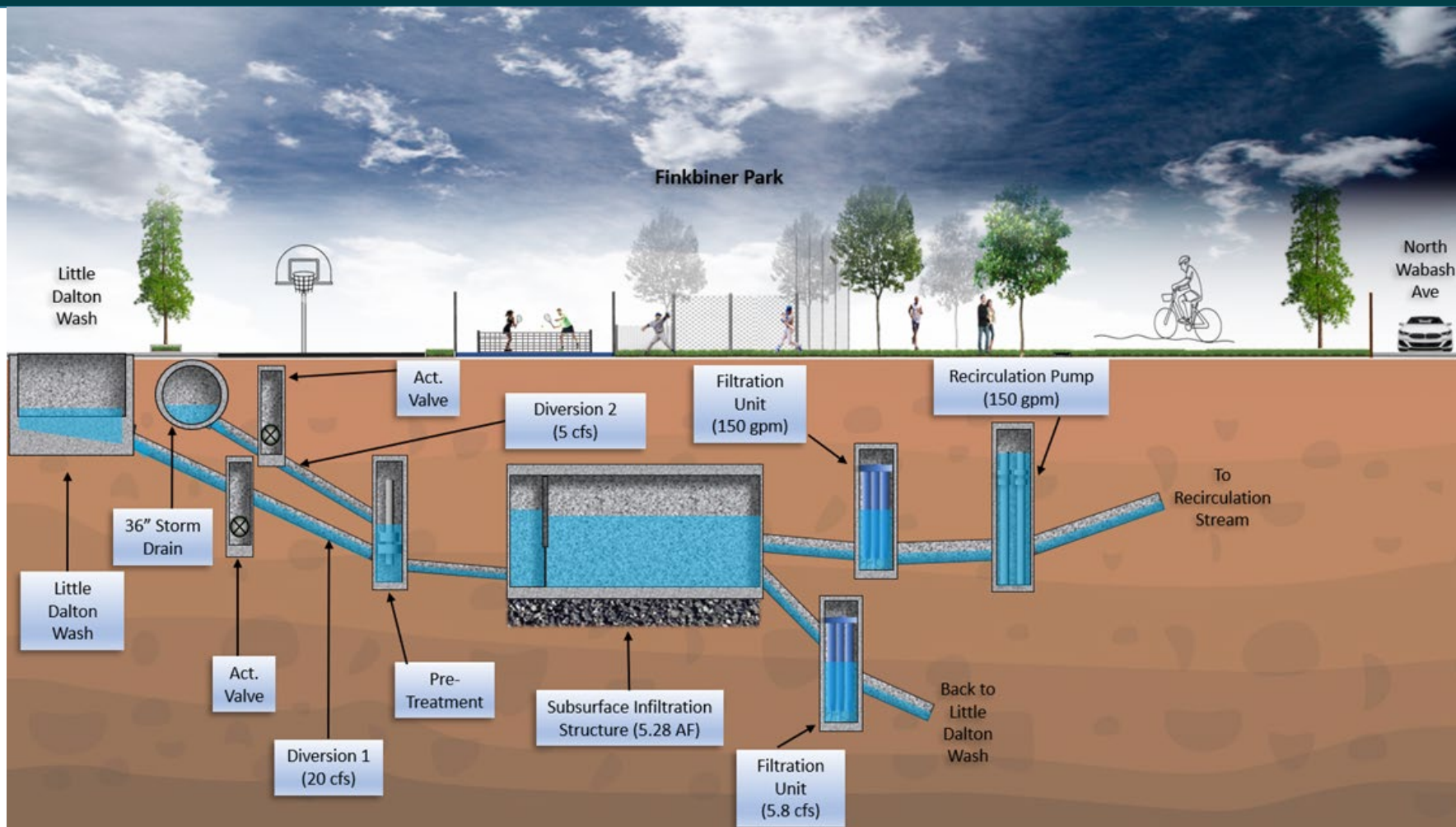


Project Details | LANDSCAPE PLAN





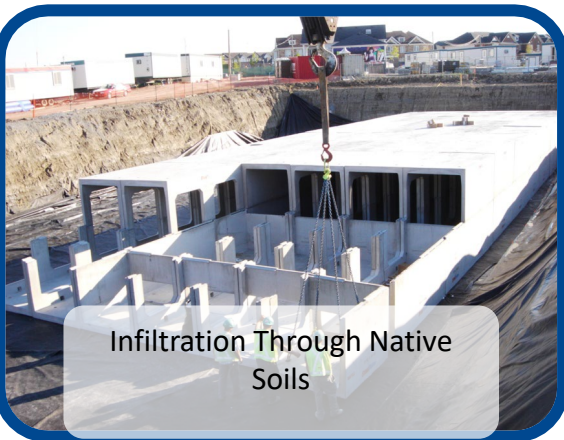
Project Details – Schematic Diagram



Diversion Rate	Storage Capacity	24-Hour Capacity	Primary Pollutant Reduction (Zinc)	Secondary Pollutant Reduction (Copper)
25 cfs	5.28 ac-ft (1.72 MG)	18.81 ac-ft	91.4%	86.7%



Project Benefits



Infiltration Through Native Soils



Permeable Pavement



Recirculation Stream and Native Vegetation

- **Water Quality** improvement in the USGR by treating stormwater and urban runoff
- **Flood Management** improvement in the USGR by offering detention capabilities
- **Nature-Based** creation of filtering bioretention and native vegetation
- **Public Waterway Access** improvement in the community by the creation of a recirculation stream
- **Park Recreational Enhancements** multi-use fields improvements, improvements and additions to the existing basketball court, and added bike path
- **Reduced Heat Island** native vegetation and 2 new shade trees throughout the park



Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Feasibility Study, Geotechnical Investigation	\$150,000	10/2022
Design	Environmental Planning (CEQA) and Permitting, Public Outreach during design, Final Design (60/90/100), Project Management	\$1,492,649	02/2025
Construction	Construction capital costs, survey, administration and design support, construction management	\$18,376,246	05/2028

Annualized Costs

Maintenance Cost:	\$227,000
Operation Cost:	\$50,000
Monitoring Cost:	\$25,000
Project Life Span:	50

Life-Cycle Costs

Life-Cycle Cost for Project:	\$27,265,053.02
Annualized Cost for Project:	\$1,136,332.66



Funding Request

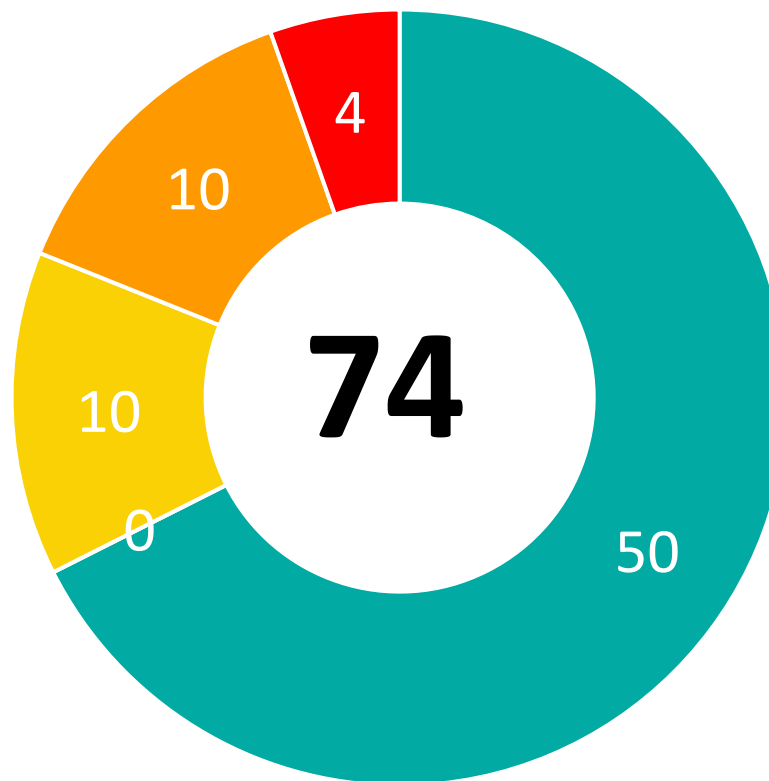
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$6,152,082	Construction	Construction capital costs, survey, administration and design support, construction management
2	\$6,152,082	Construction	Construction capital costs, survey, administration and design support, construction management
3	\$6,152,082	Construction	Construction capital costs, survey, administration and design support, construction management
TOTAL	\$18,687,046		

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



Preliminary Score*

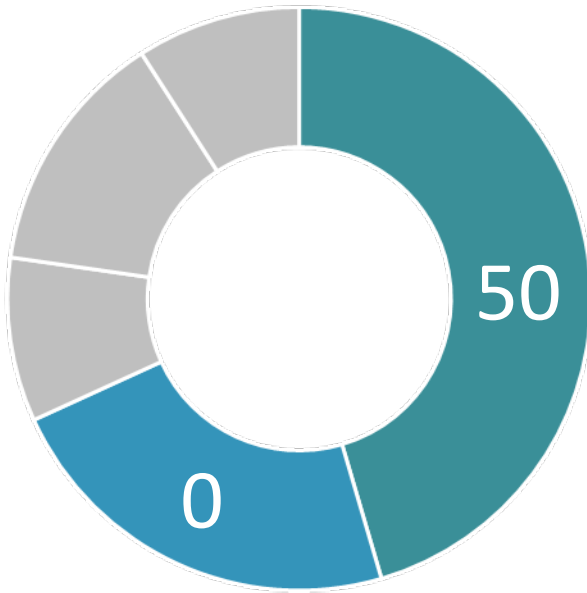
- Water Quality
- Water Supply
- Community Investment Benefits
- Nature Based Solutions
- Leveraged Funds and Community Support



*The SCW Scoring Committee has not confirmed this score. Expected to be scored on 11/27/23.



Water Quality & Water Supply Benefits*

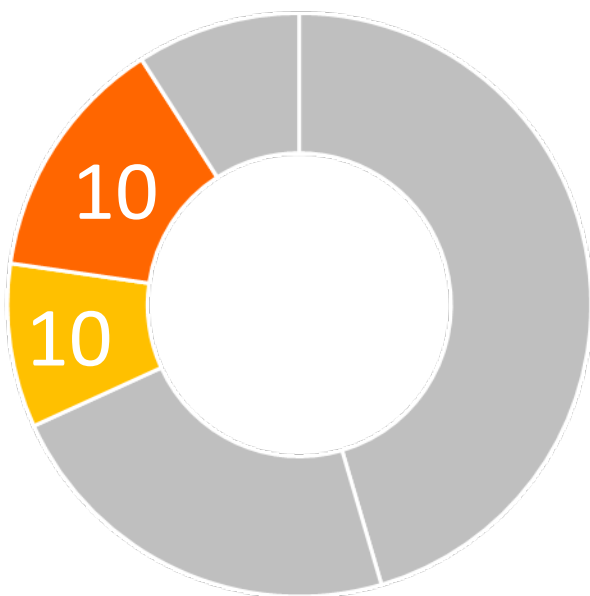


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- **Primary Mechanisms**
 - Runoff/pollutant capture
 - Infiltration
 - Filtration
- **Wet** weather project
- Tributary Area: **1,512 acres**
- 24 Hours Capacity: **18.8 ac-ft**
- Pollutant Load Reduction
 - Primary Pollutant (Zinc) – **91.4%**
 - Secondary Pollutant (Lead) – **86.7%**
- 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*

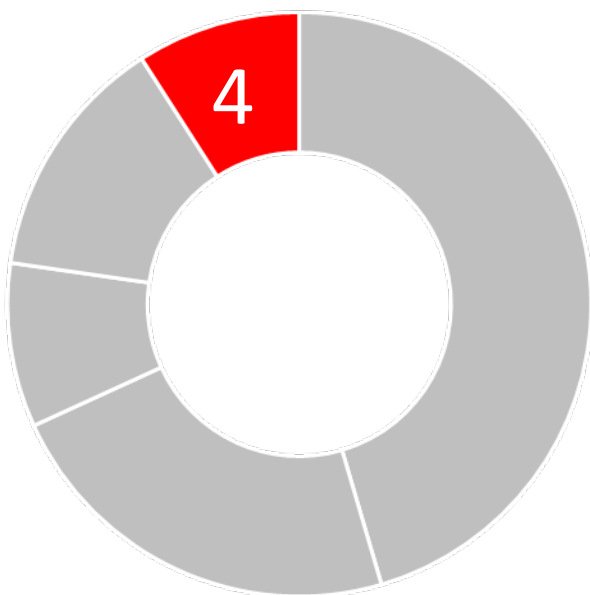


*The SCW Scoring Committee has not confirmed this score. Expected to be scored on 11/27/23.

- Community Investment Benefits
 - Improve flood management
 - Enhanced park space
 - Improve public access to waterways
 - Enhance recreational opportunities
 - Reduced heat island effect and increased shade
 - Increase the number of trees and vegetation
- Nature Based Solutions
 - Project utilizes infiltration to put runoff into soils
 - Project replaces the pavement in the North alley with permeable pavement
 - Post-construction plans include a recirculation stream, 2 additional native trees, various native shrubs, native compacted soil, and grasses



Leveraging Funds and Community Support*



*The SCW Scoring Committee has not confirmed this score. Expected to be scored on 11/27/23.

- Leveraging Funds
 - N/A
- Community Support
 - ActiveSGV led a multi-pronged and multi-lingual community outreach effort
 - Participated in community events
 - Youth Soccer Events Pop-up
 - Movies in the Park
 - Glendora Trails Day
 - Glendora Halloween Carnival
 - Strong, local, community-based Support
 - Youth Sports Council
 - Lassie League Board
 - Kiwanis Club
 - ActiveSGV
 - Glendora Community Services Foundation



Questions?

Oliver Galang, PE
Craftwater Engineering, Inc
On behalf of the City of
Glendora