



# Barnes Park Multi-Benefit Stormwater Capture Project

Infrastructure Program

Call for Project Fiscal Year 2020-2021

Upper San Gabriel River

Romany Basilyous & David Lopez (City of Baldwin Park)

Katie Harrel (CWE)

Date: Tuesday, November 29<sup>th</sup>, 2022



# Project Overview

The multi-benefit infiltration project will enhance water quality in the Upper San Gabriel River by reducing and infiltrating storm drain discharges while improving Barnes Park.

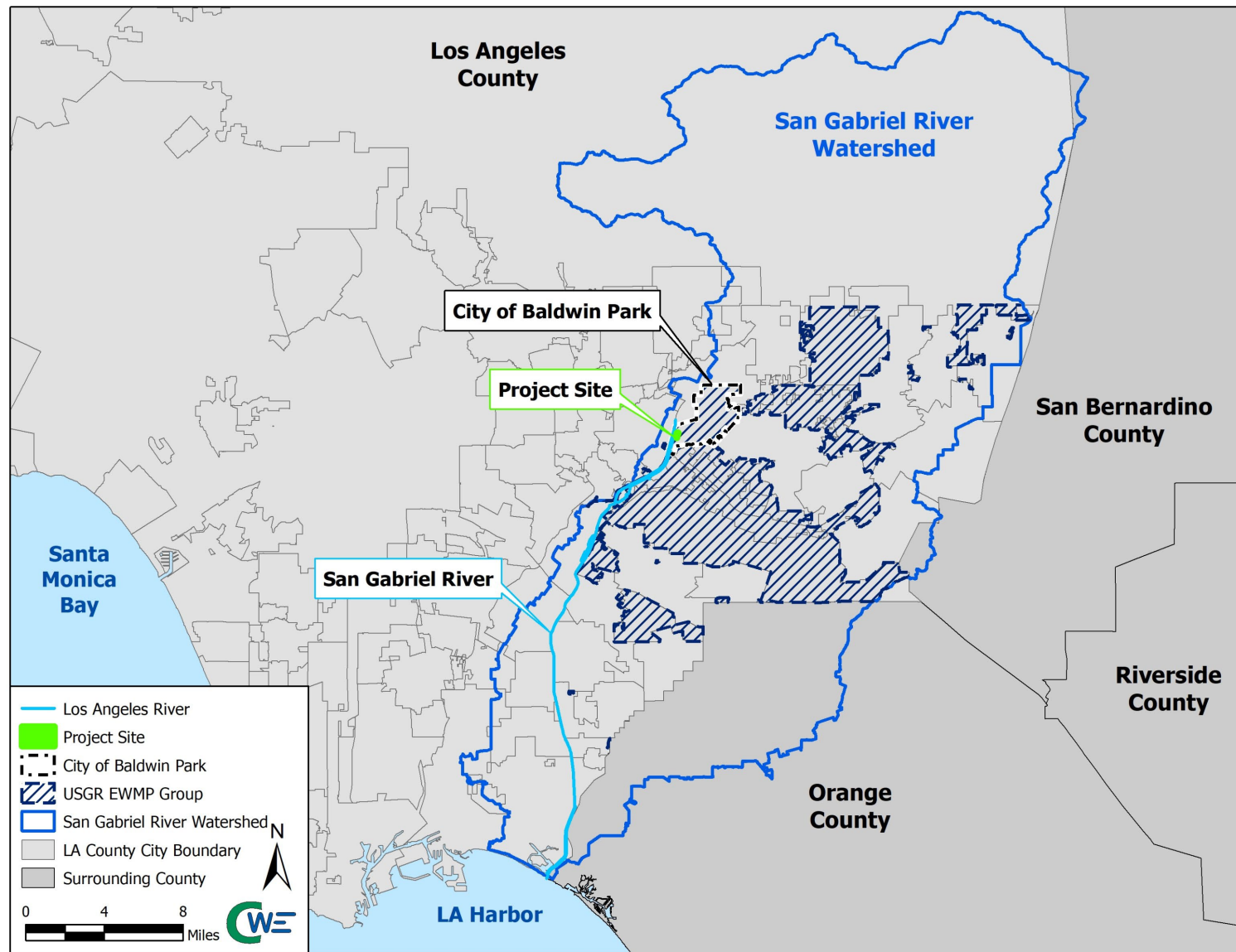
- **Primary Objective:** Capture, treat, and infiltrate runoff from an area of approximately 440 acres from the City of Baldwin Park.
- **Secondary Objectives:** Include both recreational and educational enhancements and improvement to Barnes Park. There are two offsite areas that will receive flood mitigation improvements.
- **Project Status:** Currently in design phase (90%)
- **Total SCW Funding Requested:** \$14,735,690





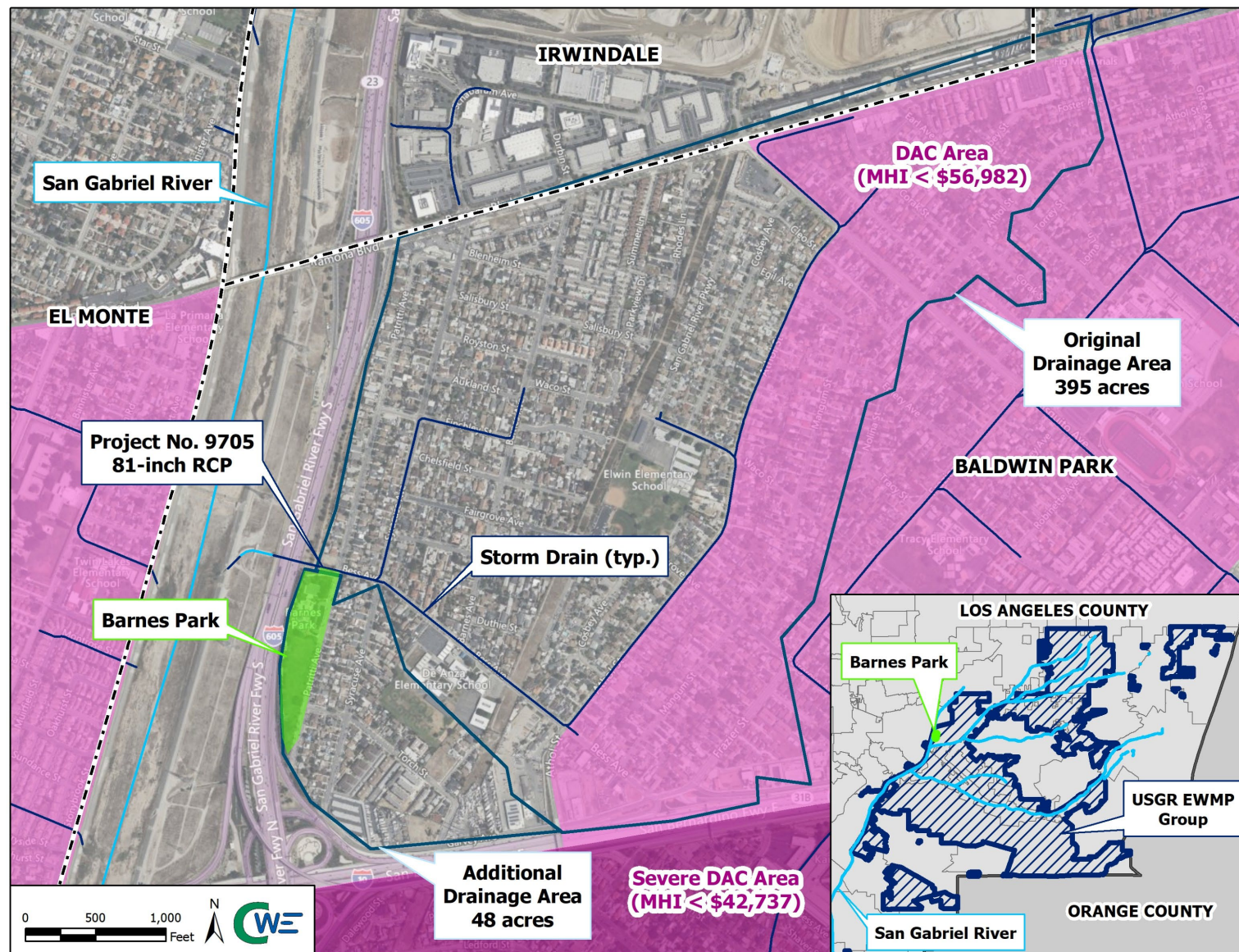


# Project Location





# Project Location







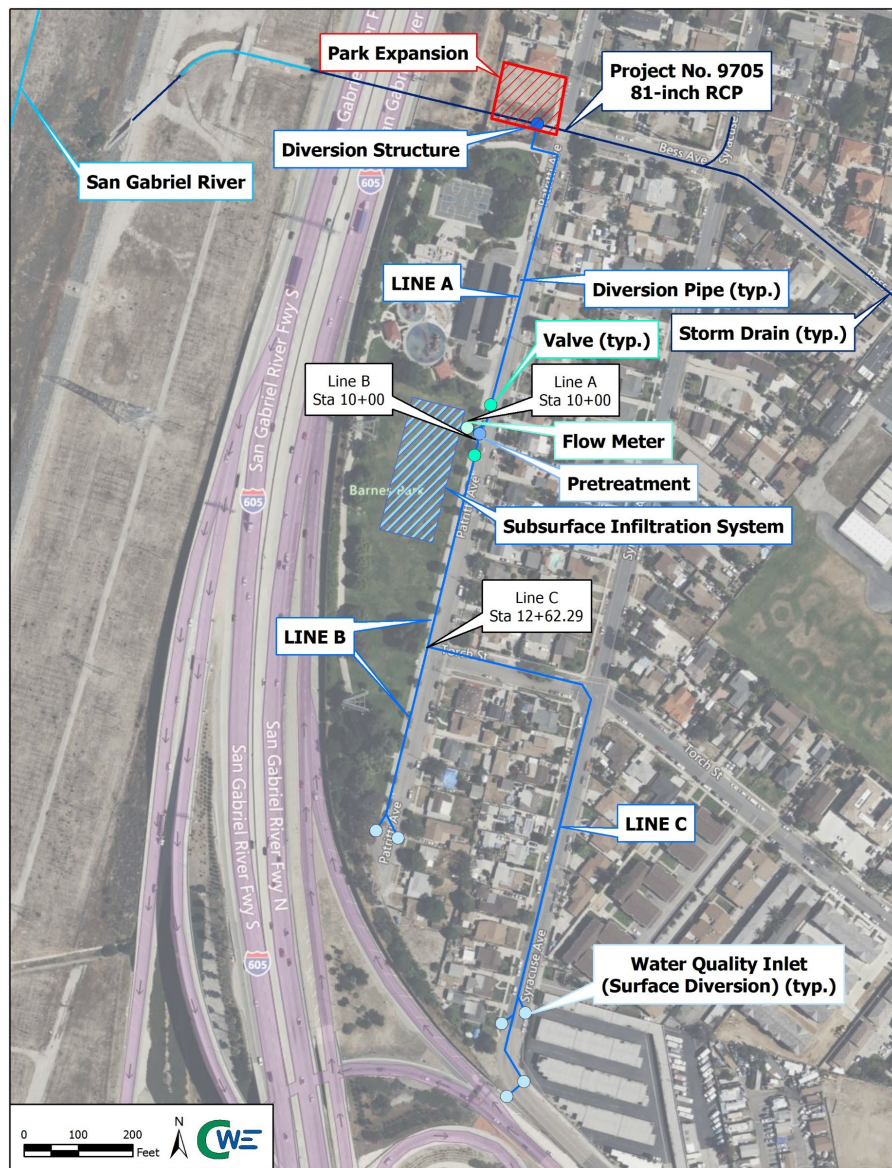
# Existing Conditions







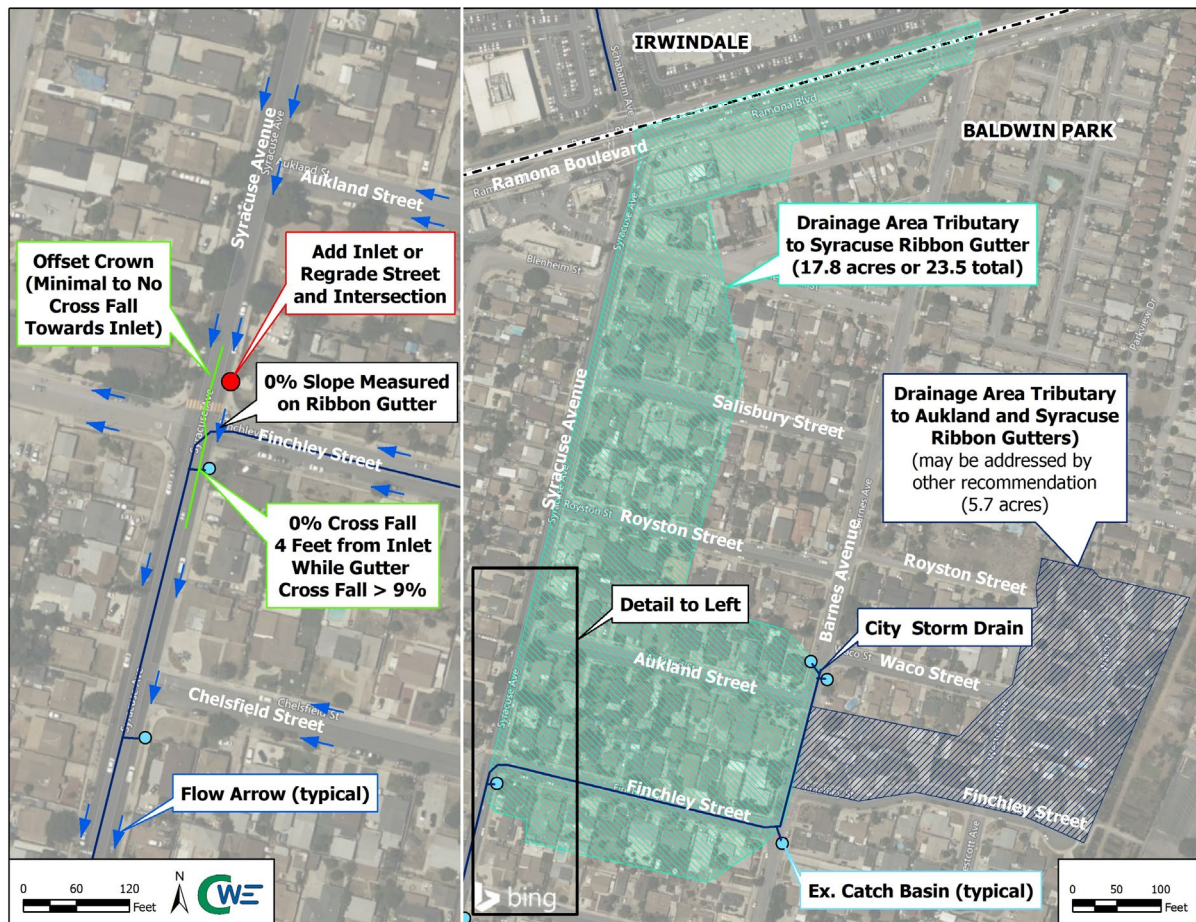
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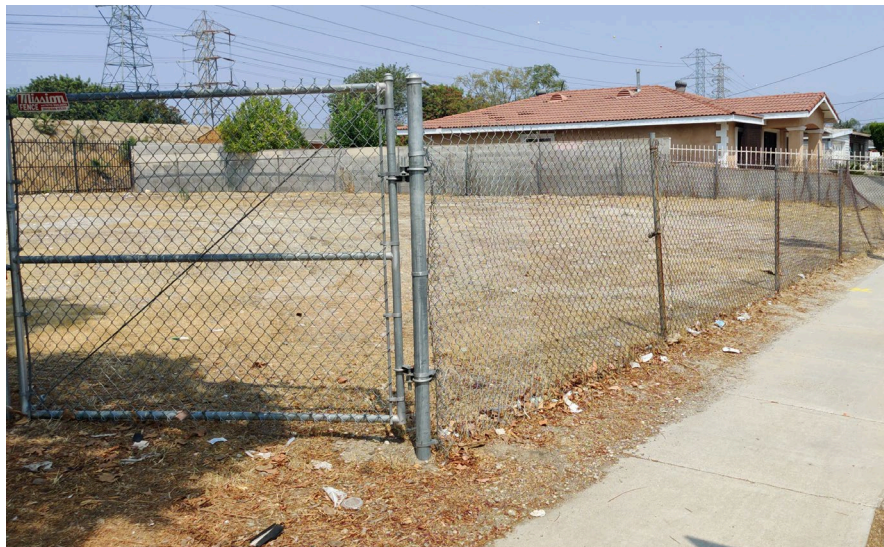
# Project Details







# Summary of Project Benefits



- Disadvantage community benefits
  - Pollutant reduction
  - Increase recreational activities
- Protect/restore urban watershed health
- Reduce urban heat island
- Increase trees for CO2 reduction
- Flood risk mitigation
- Improved lighting and security cameras
- Park expansion, outdoor futsal court
- Park Improvements
  - New soccer fields
  - New basketball courts
  - Improved inclusive playground
  - All dog and small dog park
  - Educational signage





# Project Status Update



- Current Project Phase: 90% Design Plans
- Modifications: optimized stormwater capture system and diversion expansion
- O&M and Vector Minimization Plans are in progress (drafted with Feasibility Study)
- CEQA completed November 2022
- Estimate start of construction: Fall 2023
- City may apply for SCWP funding for O&M following construction



# Cost & Schedule

Phase	Description	Cost	Completion Date
Design	Feasibility Study	\$0 (completed)	-
Design	Complete Environmental Documentation	\$470,000	December 2022
Design	100% Design, Planning, and Permitting; O&M Plan	\$854,000	Summer 2023
Construction	Construction, Construction Management, Inspection, and Testing	\$14,755,691	Winter 2024
Construction	Park Enhancements	\$1,640,000	Winter 2024
<b>TOTAL</b>		<b>\$17,735,690</b>	

- Annual maintenance: \$33,636; annual operation: \$3,364; annual monitoring: \$32,400 (total annual cost = \$69,400)
- Project Lifespan & Lifecycle Cost: 50 years, \$18,983,596
- Data on this slide is per SCWP application/reporting (pending final costs)
- Total project cost includes \$3,100,000 contribution from Proposition 68





# SCW Funding Allocations

Year	SCW Funding	Phase	Efforts during Phase and Year
FY20-21	\$1,000,000	Design	Environmental documentation; 100% design, planning, and permitting; O&M Plan development; Stakeholder and community outreach/engagement activities
FY21-22	\$1,500,000	Design	Same as above
FY22-23	\$7,400,000	Design/Construction	Construction (including contingencies) and construction management
FY23-24 (Projected)	\$4,835,690	Construction	Construction (including contingencies), construction management, inspection, testing, and park enhancements
<b>TOTAL</b>	<b>\$14,735,690</b>		

- SCW Funding received to date: \$2,500,000
- Leveraged Funding: Prop 68 (\$3,100,000)
- May apply for O&M Funding once the project is completed
- Lifespan 50 years & Lifecycle cost of \$18,983,596



# Questions?

**Katie Harrel**

**Romany Basilyous**



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

# Bassett High School Multi-Benefit Stormwater Capture Project

Infrastructure Program  
Call for Project Fiscal Year 2020-2021  
Upper San Gabriel River  
Los Angeles County Public Works  
Joseph Venzon, P.E.

Date: 11/29/2022



# Project Overview

The Bassett High School Multi-Benefit Stormwater Capture Project is a proposed regional project led by the County of Los Angeles in partnership with Bassett Unified School District to construct a regional, multi-benefit, stormwater capture project at Bassett High School in the City of La Puente.

The Project's objectives are to improve water quality, increase water conservation through groundwater recharge, increase recreational opportunities, and provide educational outreach to the community.

- Primary Objective: Water Quality
- Secondary Objectives: Water Supply, Community Investment, Nature-Based Solutions, Funds and Community
- Project Status: Planning (Completed), Design, & Construction
- Total SCW Funding Requested: \$31.2M







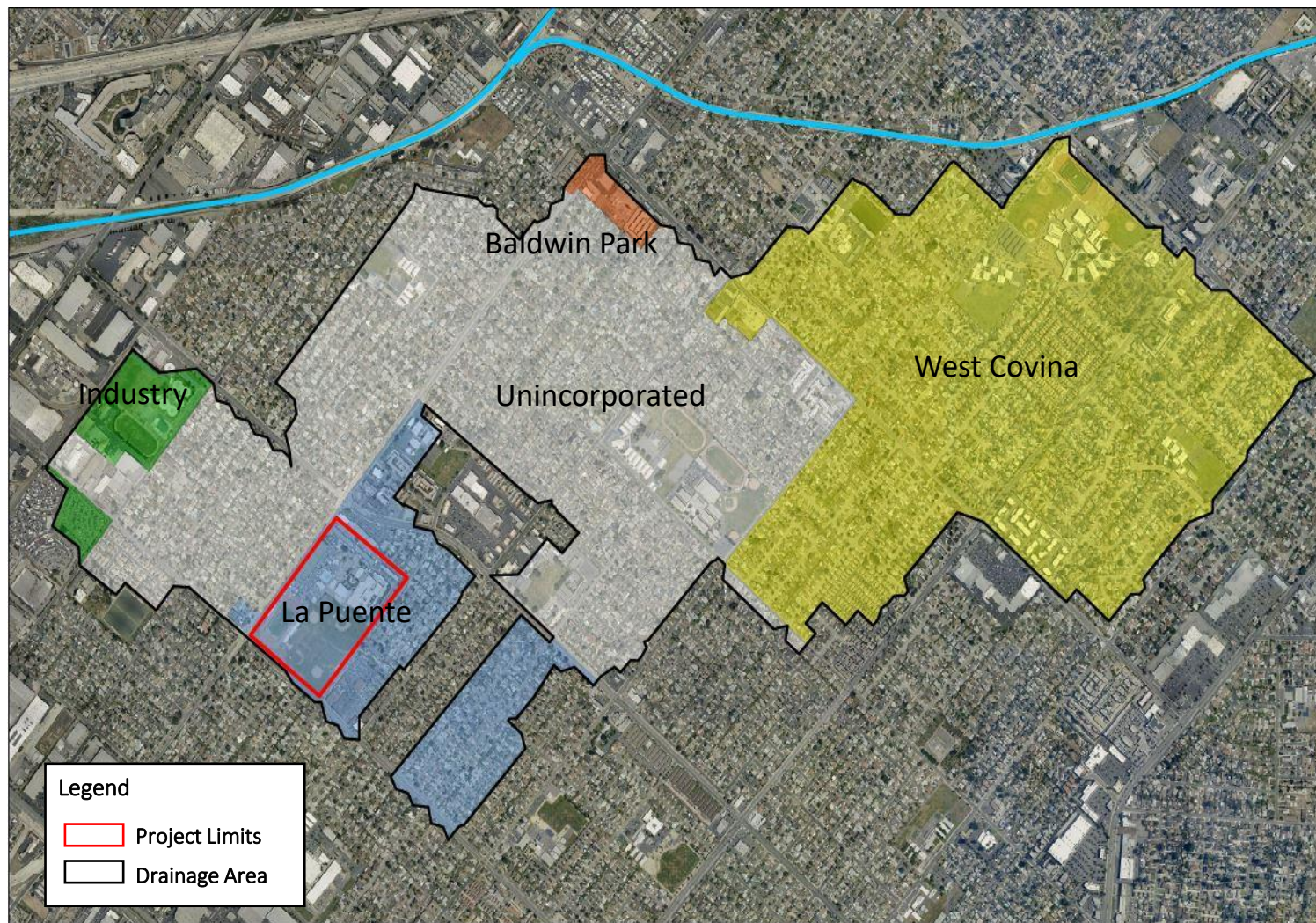
# Project Location







# Project Location

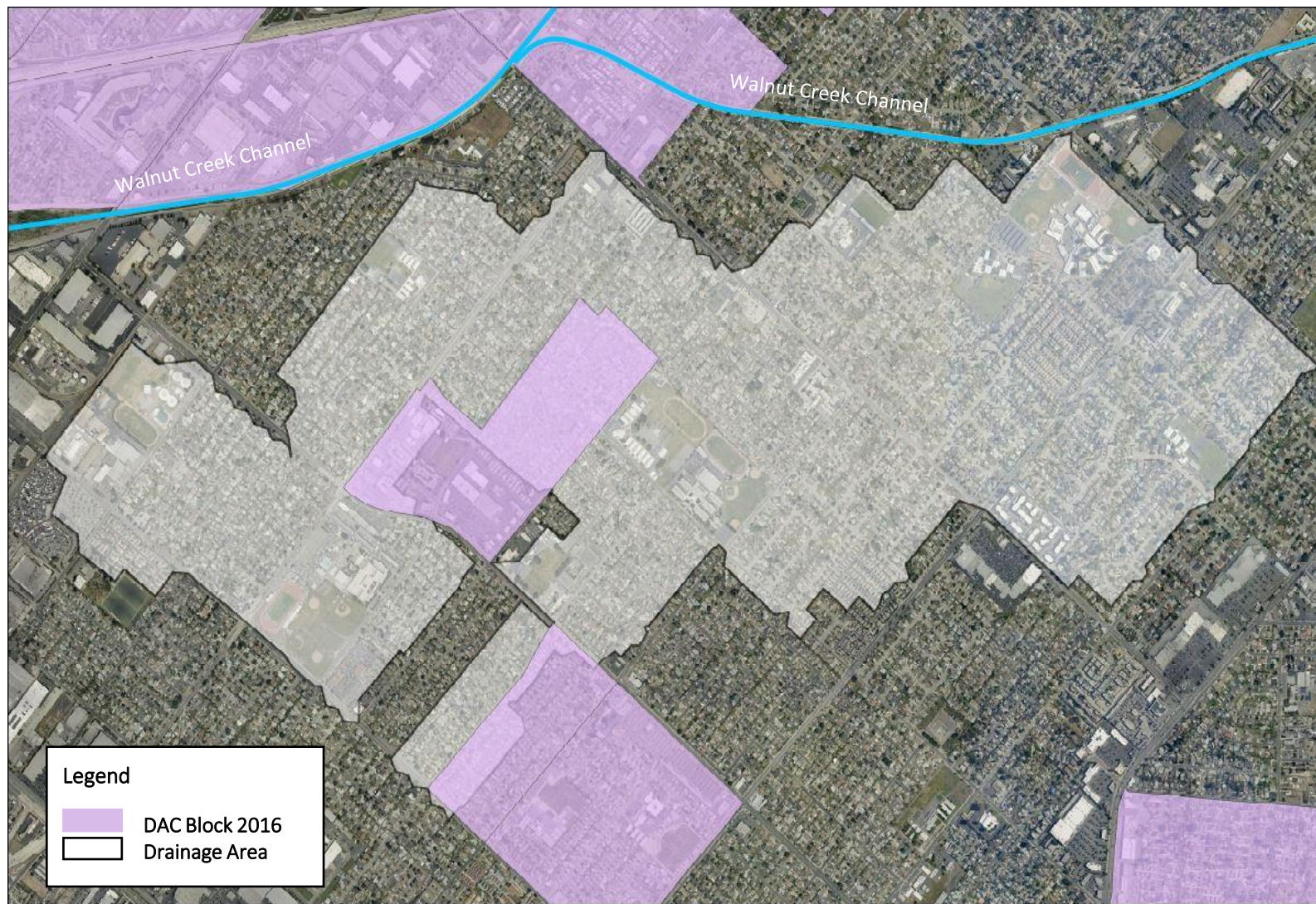


- Drainage Area
  - 1,146 acres
- Jurisdictions
  - Baldwin Park
  - Industry
  - La Puente
  - West Covina
  - Unincorporated County





# Project Location

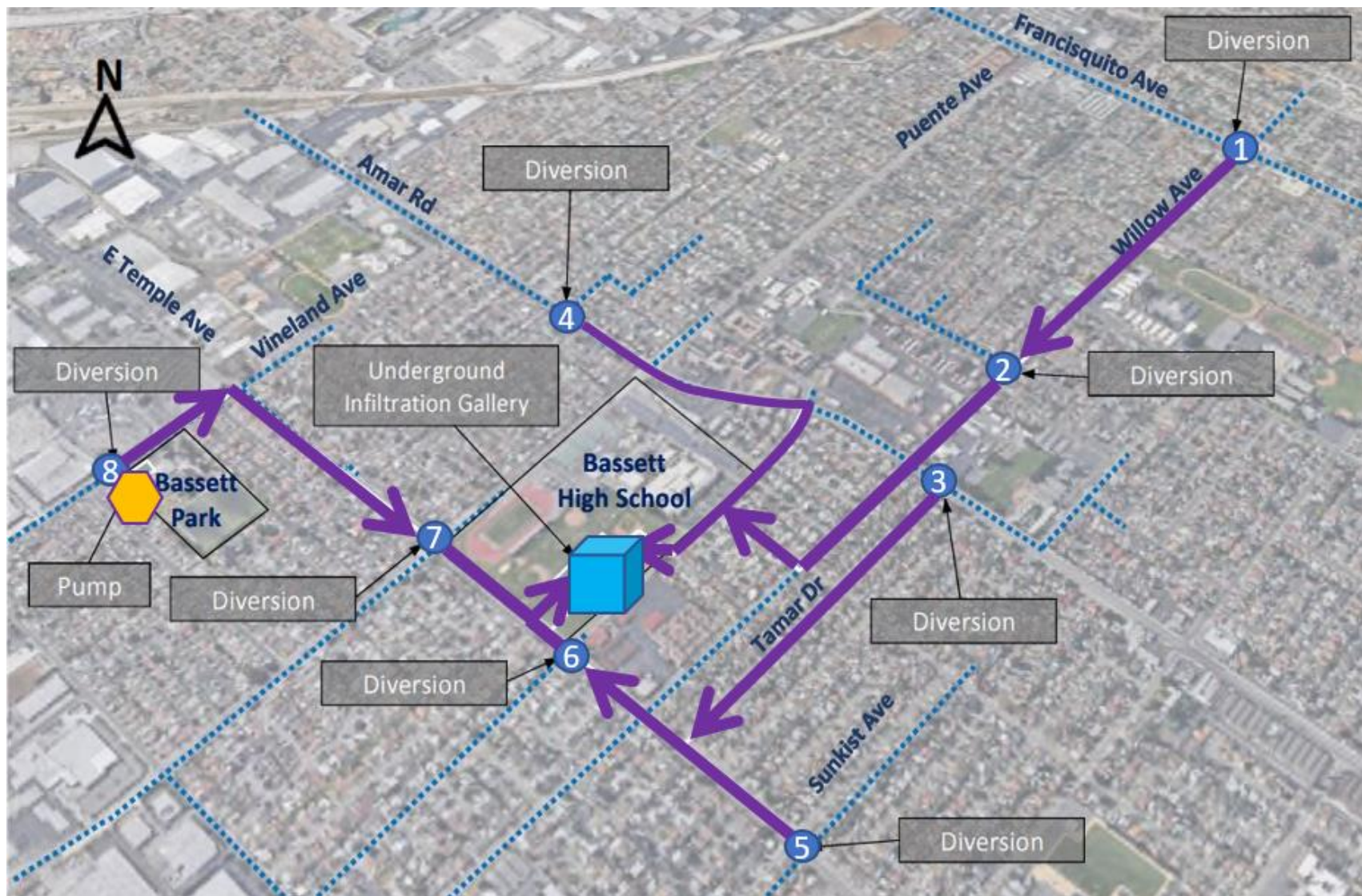


- City of La Puente
- Disadvantaged Community





# Project Details



## Bassett High School

- 8 diversion locations
- 18,200 ft diversion lines
- 1 potential pump at Bassett Park
- Infiltration gallery at school





# Project Details



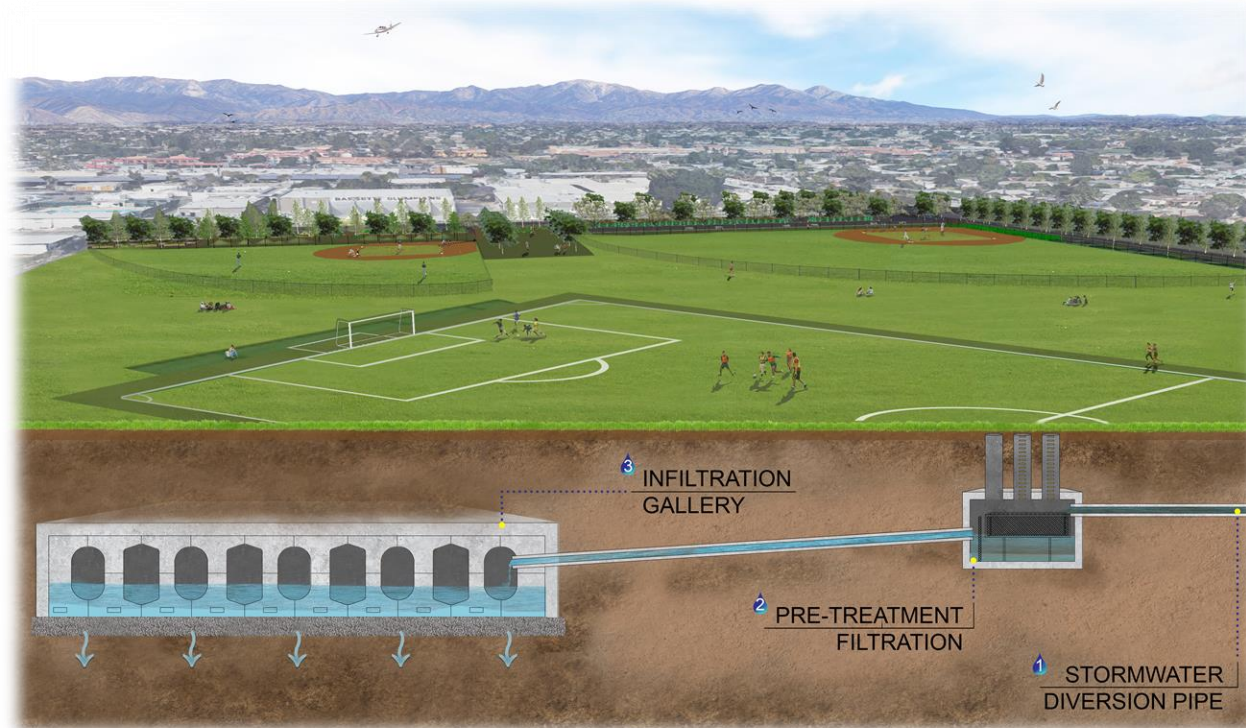
- Multi-use Sports Field within Bassett High School
- Corner Community Passive Park
- Low Impact Development





# Summary of Project Benefits

- Water Quality
  - Capturing and Treating the 85<sup>th</sup> percentile, 24-hour storm: 50.4 ac-ft
  - Removing more than 95% of zinc and copper
- Water Supply
  - Capturing and Infiltrating 513 ac-ft/year
  - Increase water supply to the San Gabriel Basin







# Summary of Project Benefits

- **Community Investment**
  - Enhance new recreational opportunities
  - Create green space at a school
  - Plant tree canopies
- **Nature Based Solutions**
  - Install bioswales
  - Utilize native and/or drought tolerant plants
- **Leveraging Funds**
  - Funding match
- **Community Support**
  - Project Partnership
  - Coordination with the School/School District
  - Coordination with Amigos De Los Rios (Emerald Necklace Project)







# Project Status Update



- Current Project Phase: *Design*
- Summary of Project modifications, concerns, delays:
  - *O&M for Corner Passive Park*
- Has CEQA been completed? *No*
- Estimated Start of Construction: *Late 2024*
- If applicable, when is project expected to apply for SCW funding for future phases (i.e. Construction):
  - *Apply for O&M Year 27-28.*





# Cost & Schedule

Phase	Description	Cost	Completion Date
Planning (Project Concept Development)	Preliminary Design Plans, Permitting and environmental compliance, Coordination and preparation of lease and partnership agreements	\$1,200,900	September 30, 2022
Design	60%, 90% and Final Design Plans, Specifications and Estimates	\$1,799,100	June 3, 2024
Construction	Bid, Award, Advertise, Groundbreaking activities	\$59,400,000	April 27, 2027
<b>TOTAL</b>		<b>\$62,400,000</b>	

- Description of Annual Costs: *O&M of Stormwater Capture System and Community Passive Park*
- Project Lifespan: *50 years*
- Life Cycle Cost: *\$67,400,000 (\$100,000 per year for O&M and TPCE)*



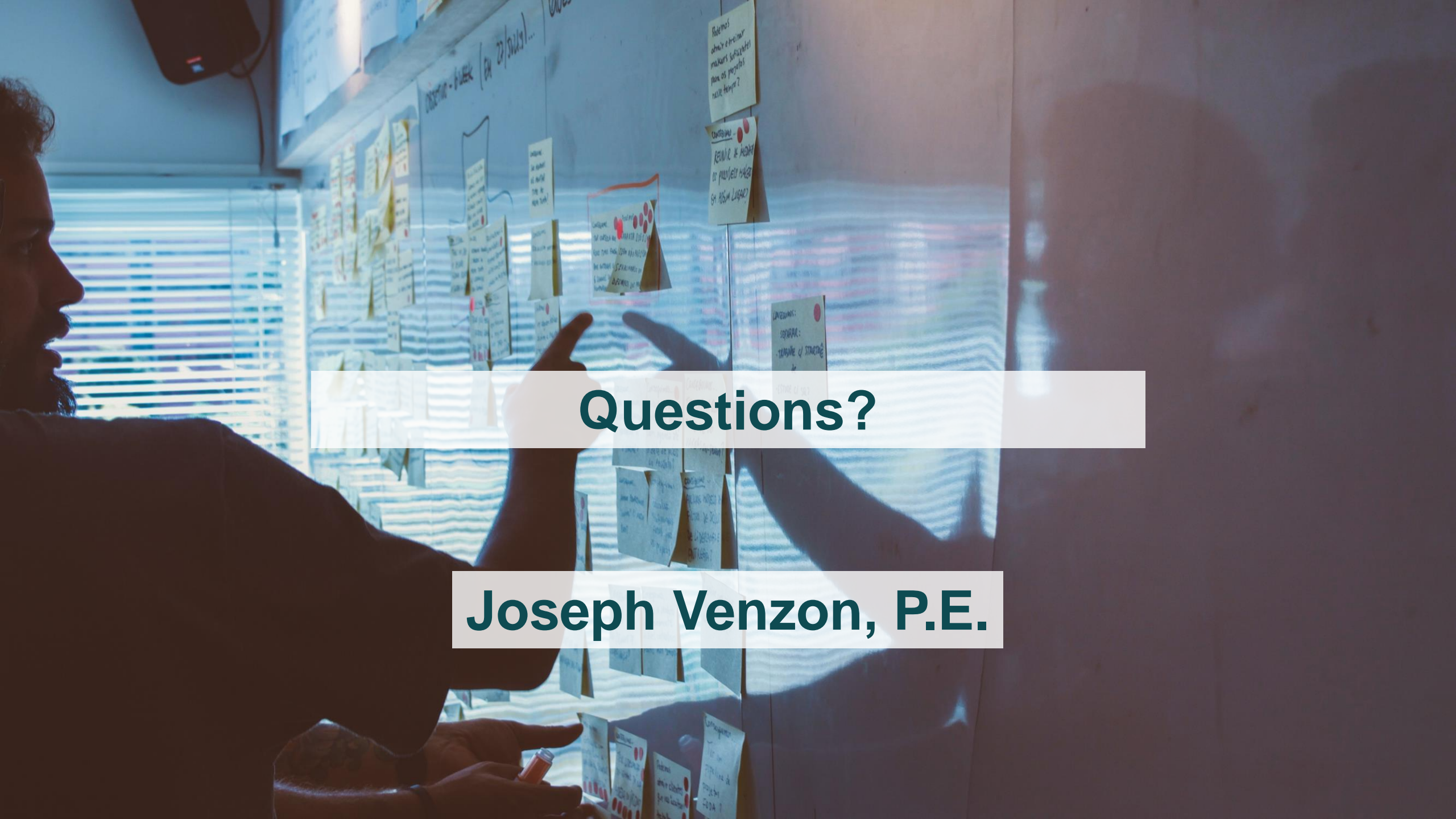


# SCW Funding Allocations

Year	SCW Funding	Phase	Efforts during Phase and Year
FY20-21	\$3,000,000	Planning	Additional Geotechnical Studies, Preliminary Design Plans, Project Concept Report
FY21-22	\$7,200,000	Planning	Final Concept Report, Community Outreach, Partnership Coordination, O&M Coordination
FY22-23	\$7,000,000	Design	60% Design, Environmental Documentation, Community Outreach
FY23-24 (Projected)	\$4,000,000	Design	90% and Final Design Plans, Community Outreach
FY24-25 (Projected)	\$10,000,000	Construction	Advertise, Bid & Award
<b>TOTAL</b>	<b>\$62,400,000</b>		

- SCW Funding received to date: \$10,200,000
- Leveraged Funding amount and percent, if applicable: 50%
- Description of future potential SCW funding requests, if applicable: O&M





**Questions?**

**Joseph Venzon, P.E.**





# Pedley Spreading Grounds Pond Enhancements

Infrastructure Program

Call for Project Fiscal Year 2020-2021

Upper San Gabriel River

East San Gabriel Valley Watershed Management Group

(City of San Dimas, City of Claremont, City of Pomona, City of La Verne)

Jonathan Abelson

November 29, 2022





# Project Overview

This project proposes to deepen the ponds of a spreading grounds to accommodate local urban runoff.

- **Primary Objective:** Increase water supply for Cities of Pomona and Claremont
- **Secondary Objectives:** Provide a parklet parcel to spark community education and house native vegetation
- **Project Phases:** Planning, Design and Construction
- **Total SCW Funding Requested:** \$2,825,900.00

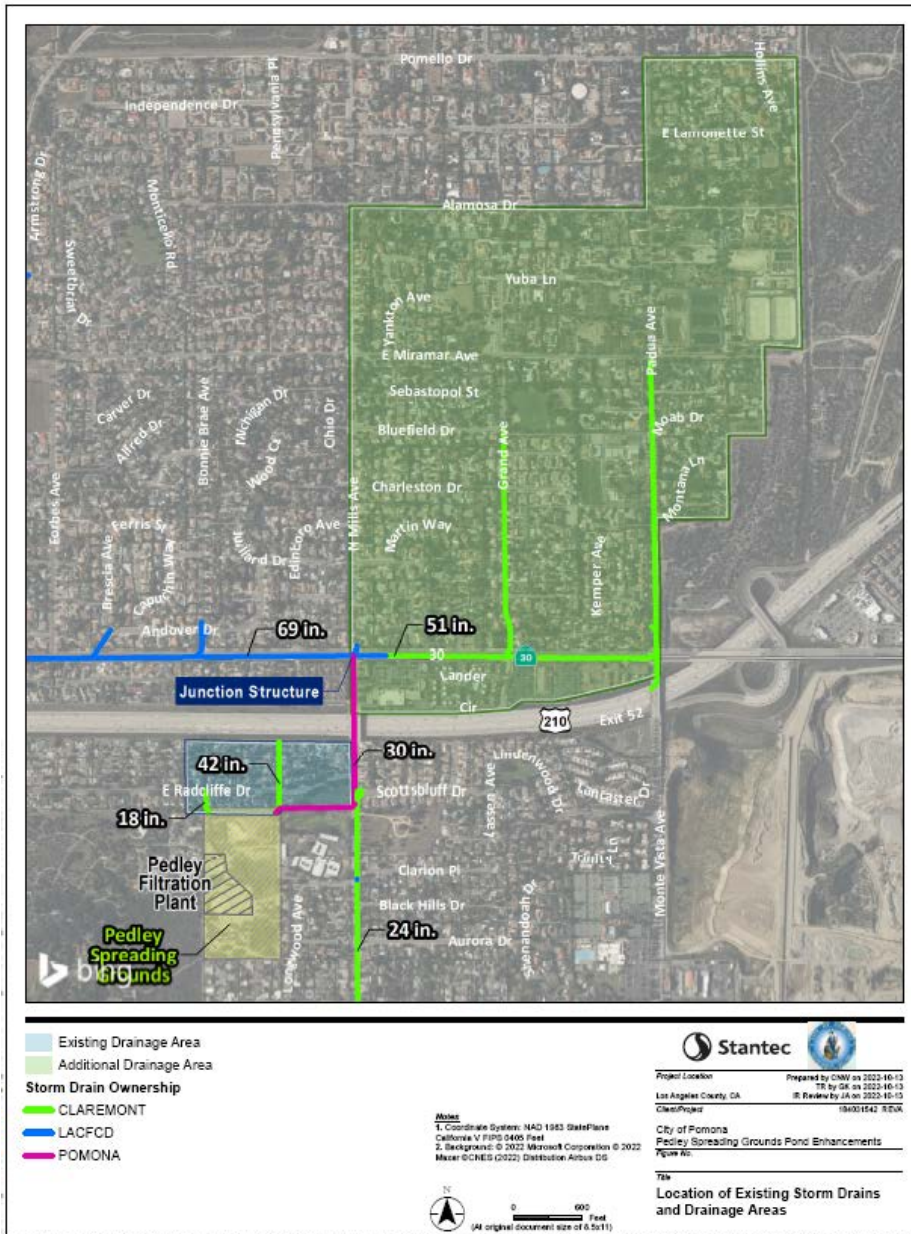








# Existing and Additional Drainage Areas



- Existing Drainage Area: 21 acres
- **Additional Drainage Area: 375 acres**
- Serves Claremont and Pomona
- No Disadvantaged Community Benefit



# Project Details



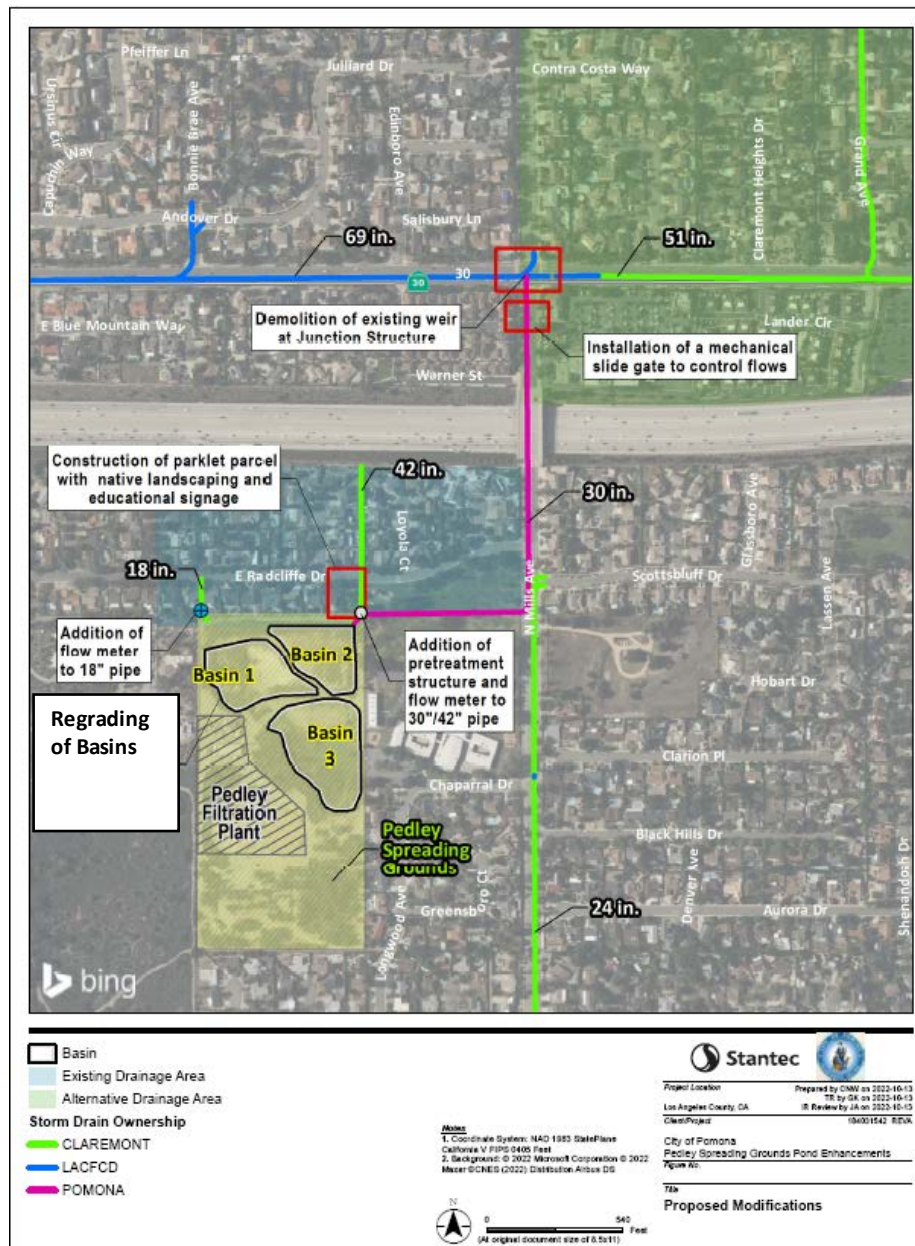
Existing Concrete Plug



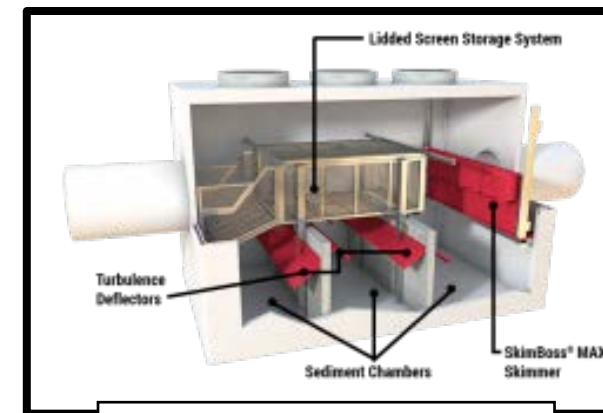
Flow Monitoring System



Basin Regrading



Mechanical Slide Gate



Pretreatment Structure





# Current Site Conditions



- Uncompacted soils and unclear boundaries between basins
- Geotechnical analysis completed in 2022
- Surveying completed in 2022
- CCTV of Mills Ave storm drain completed in 2022
- Potholing investigations ongoing



# Summary of Project Benefits

- **Water Quality (50 points – No change)**
  - 32.46 ac-ft/1.8 million = 18.03 Cost Effectiveness (20 pts)
  - 100% Primary (Copper) /Secondary (Zinc) Pollutant Removals (30 pts)
- **Water Supply (18 points –increase from 0 pts)**
  - Annual Life Cycle Cost \$107,065.62/ Annual Average Capture Volume 169.14 ac-ft = \$633/ac-ft (13 pts)
  - 169.14 ac-ft (100-200 ac-ft/yr) (5 pts) - (increase from 23.75 ac-ft)
- **Community Investment Benefits (2 pts – No change)**
  - Enhance benefits by decreasing impact of non-point source pollutants
  - Improving flood management
  - Improvement of adjacent parklet with native vegetation and educational signage
- **Nature Based Solutions (5 points – No change)**
  - Implements infiltration, a natural process to slow, detain, capture and infiltrate water
- **Leveraging Funds (0 points – No change)**
  - None
- **Community Support (4 points – No change)**
  - Support from Industrial Environmental association
- **Total Score : 79 points (due to increase of Water Supply Benefits)**
  - Original Score: 61 points





# Project Status Update



- **Current Project Phase:**  
Environmental Documentation,  
Design
- **Estimated Start of Construction:**  
Summer 2023



# Diversion Modifications

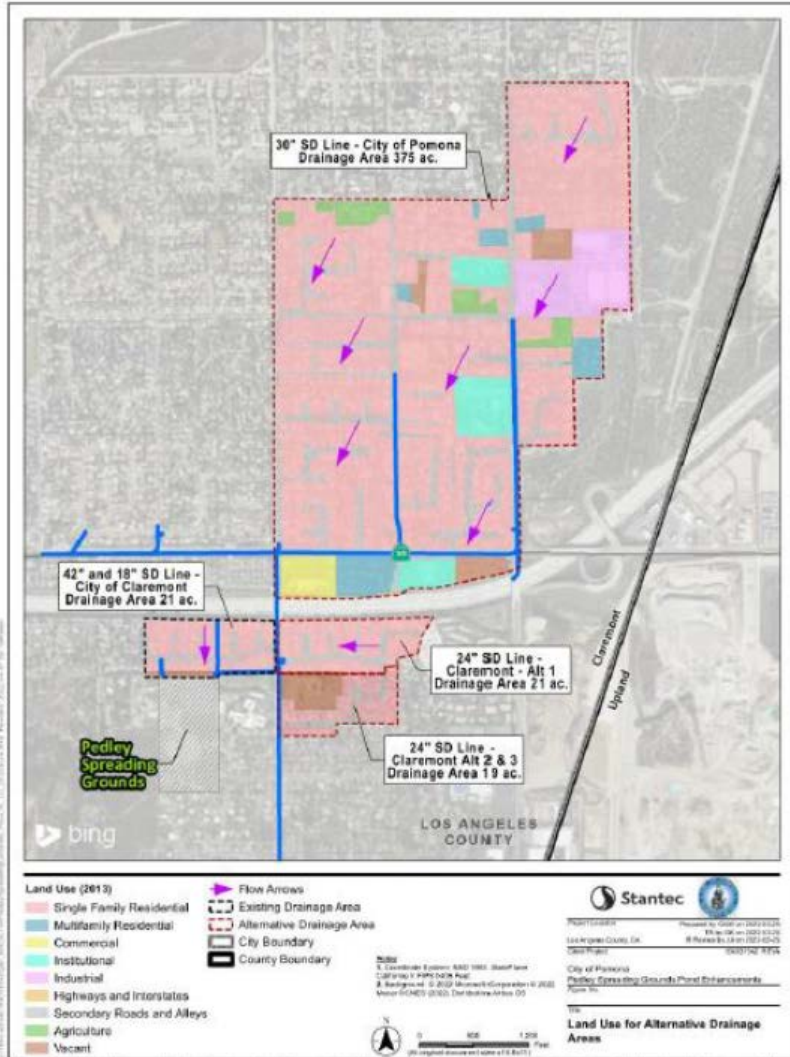


- Controlled through a flow control structure with a manually-operated mechanical slide gate.
- Smart cover flow meters will be installed at key manholes to monitor flows within the storm drain.





# Water Supply/Capture Area Modifications



- Water supply will increase from 23.75 acre-feet to 169.14 acre-feet per year.
- Field investigations confirmed connectivity to 375-acre drainage area once existing concrete plug is removed.
- 375-acre drainage area is proposed to be diverted to the Pedley Spreading Grounds rather than the 45.8 acre drainage area originally proposed.



# Additional Status Updates

- CEQA
  - Initial Study planned to be completed 1/15/2023
- No deferred plans





# Cost & Schedule

Phase	Cost	Completion Date
Design	\$502,180 (\$256,900)	5/5/2023 (5/1/2022)
Permitting		5/5/2023 (12/1/2022)
Construction	\$2,323,720 (\$2,569,000)	1/1/2025
<b>TOTAL</b>		

- Annual Costs - \$20,000 (Maintenance), \$10,000 (Operation), \$10,000 (Monitoring)
- Project Lifespan: 30 years
- Lifecycle Cost: \$3,573,240.04



# SCW Funding Allocations

Year	SCW Funding	Phase	Efforts during Phase and Year
FY20-21	\$102,760	Planning	
FY21-22	\$154,140	Planning/Design	
FY22-23	\$1,330,180	Design/Construction	
FY23-24 (Projected)	\$1,212,120	Construction	
FY24-25 (Projected)	\$26,700	Construction	
<b>TOTAL</b>	<b>\$2,825,900</b>		

- SCW Funding received to date: \$1,587,090
- Leveraged Funding amount: None





**Questions?**

**Jonathan Abelson**





# Wingate Park Regional EWMP Project

Infrastructure Program

Call for Project Fiscal Year 2020-2021

Upper San Gabriel River

City of Covina

Michael Flores Jr & Rafael Fajardo (City of Covina)

Katie Harrel (CWE)

Date: Tuesday, November 29, 2022





# Project Overview

The multi-benefit infiltration project will enhance Wingate Park and improve water quality in the Upper San Gabriel River by reducing stormwater discharges.

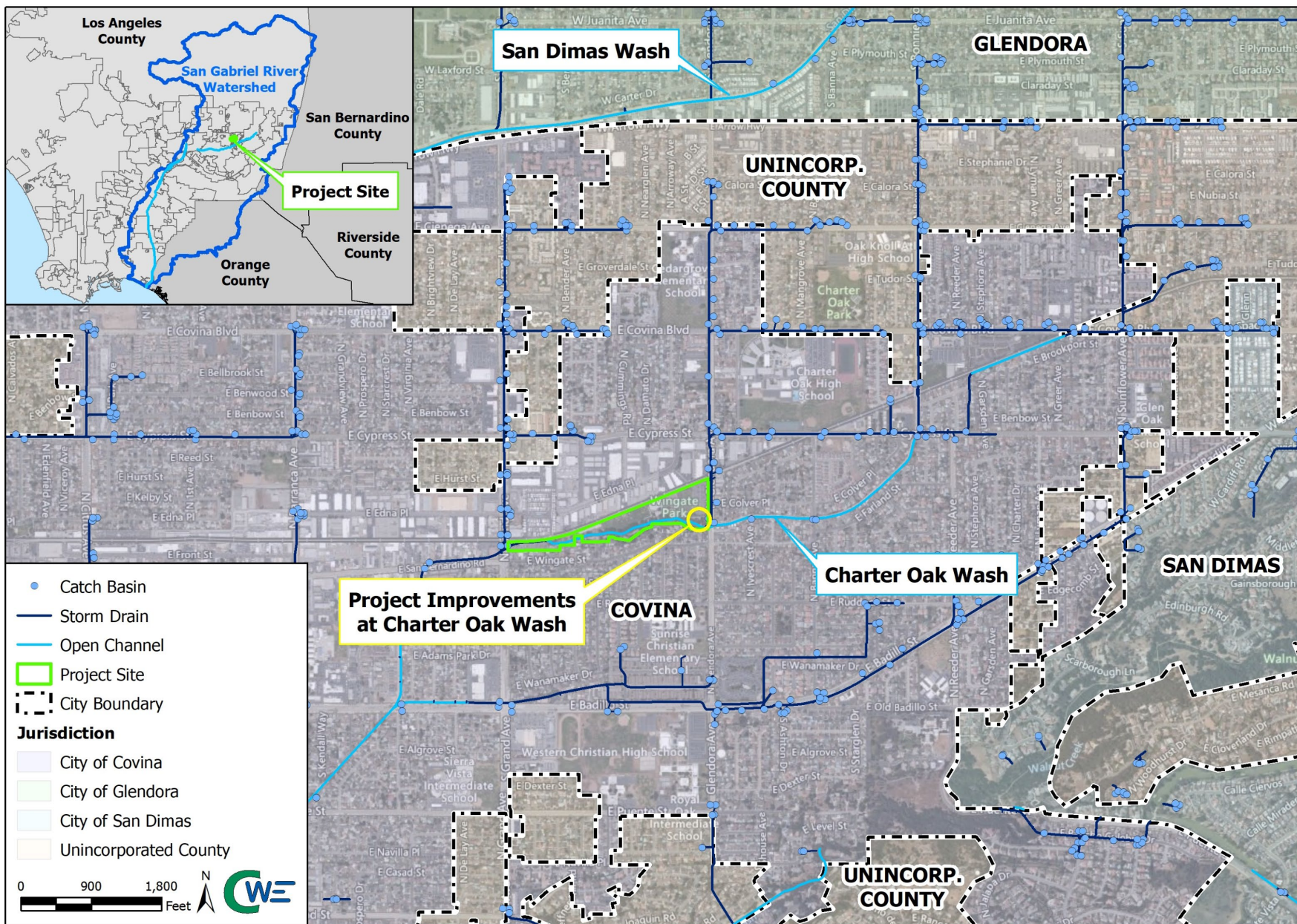
- **Primary Objective:** Capture, treat, and infiltrate runoff from an area of approximately 1,100 acres from the cities of Covina, Glendora, San Dimas, as well as unincorporated LA County.
- **Secondary Objectives:** The project will include recreational and educational enhancements at the park.
- **Project Status:** 100% Design Plans
- **Total SCW Funding Requested:** \$24,177,675







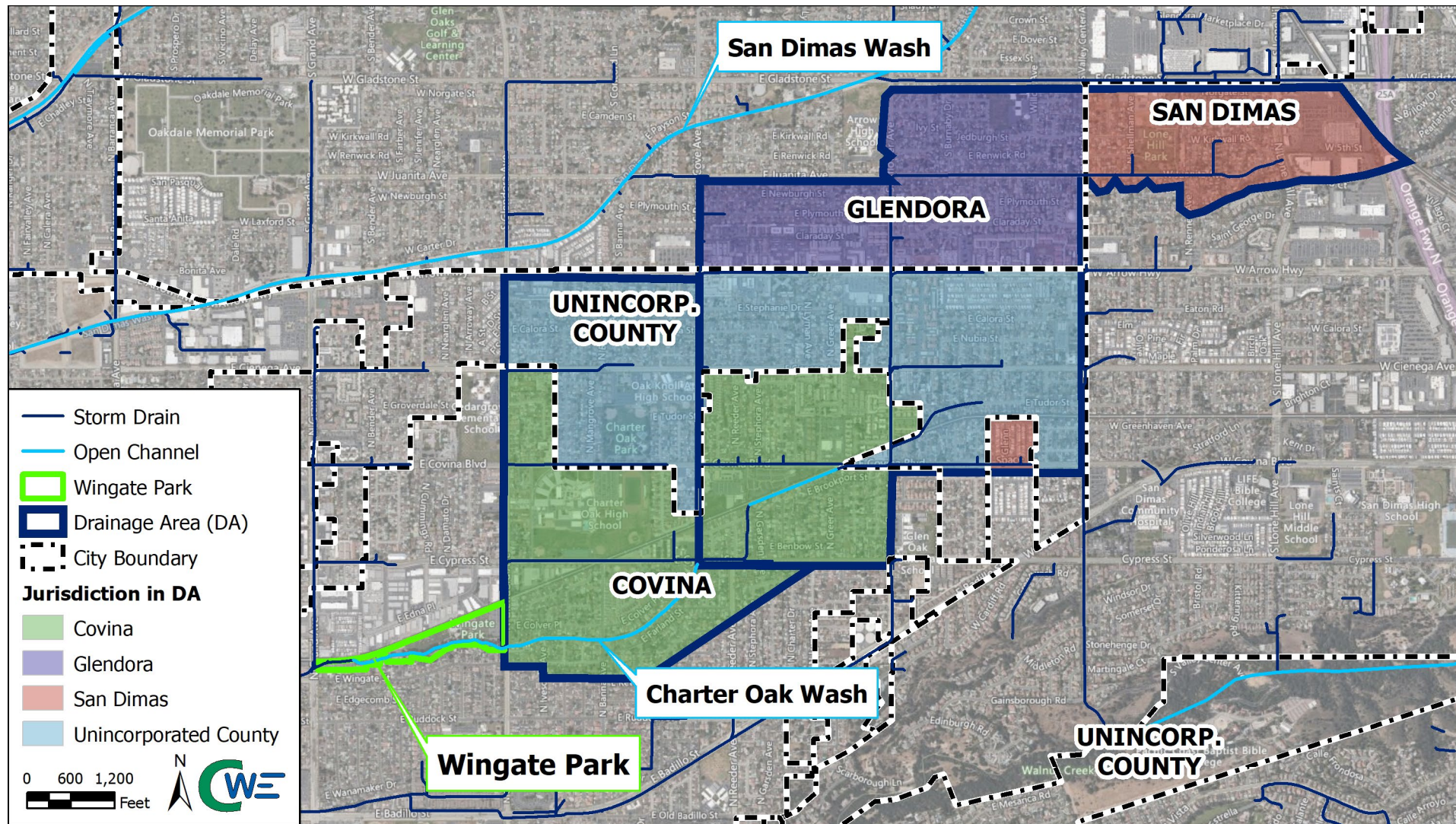
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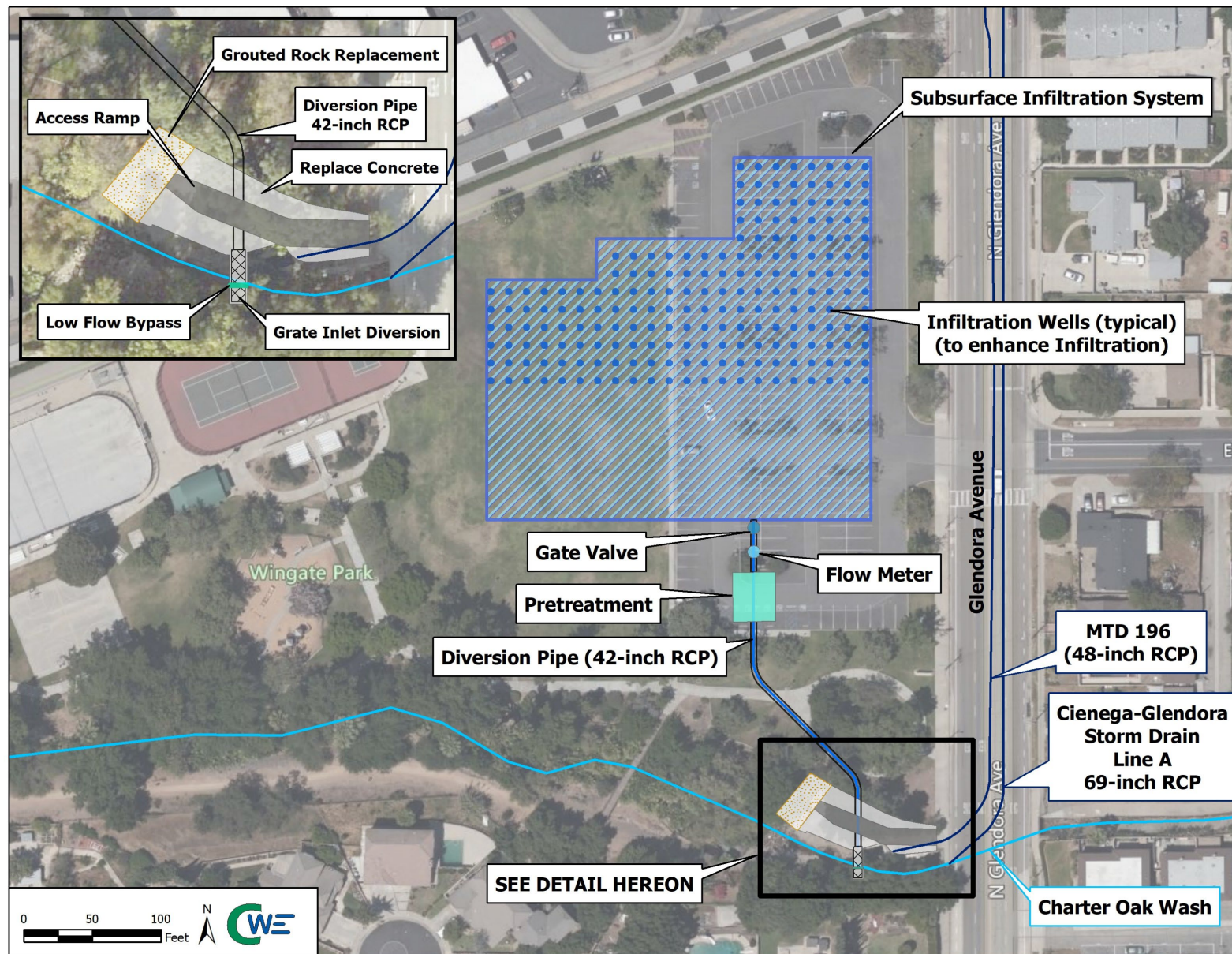
# Existing Conditions







# Project Details







# Summary of Project Benefits



- Park improvements
- Walking trail with LID features
- New soccer field
- New inclusive playground area inspired by nature
- Improved parking lot
- Improved water quality/recharge
- Energy efficient lighting
- Drought tolerant landscaping
- Flood risk mitigation
- Educational signage





# Project Status Update



- Current Project Phase: 100% Design Plans
  - Construction pending funding disbursement
- Modifications: bioswale converted to LID features (same benefits)
- O&M and Vector Minimization Plans were included with application/reporting
- CEQA completed (4/15/22)
- Estimate start of construction:
  - November 2023 (if funding is obtained)



# Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Preliminary Engineering and Feasibility	(incurred prior to SCWP)	Completed
Design	Final Design, CEQA, & Project Management	\$2,787,425	Completed
Design	Permits & Approvals, Construction Drawings, Bid & Award, Project Management		Fall 2023 (pending funding)
Construction	Construction and Construction Management	\$21,390,250	Summer 2025 (18 months)
O&M	Operation and Monitoring	Pending (not below)	Ongoing
<b>TOTAL</b>		<b>\$24,177,675</b>	

- Annual maintenance: \$33,636; annual operation: \$3,364; annual monitoring: \$32,400 (total annual cost = \$69,400)
- Project Lifespan & Lifecycle Cost: 50 years, \$26,771,992
- Data on this slide is per SCWP application/reporting (pending final costs)
- Completion dates shown are assuming FY24-25 funds are provided in FY23-24





# SCW Funding Allocations

Year	SCW Funding	Phase	Efforts during Phase and Year
FY22-23	\$6,630,084	Construction	Construction and Construction Management
FY23-24 (Projected)	\$7,130,084	Construction	Construction and Construction Management
FY24-25 (Projected)	\$8,580,082	Construction	Construction and Construction Management
<b>TOTAL</b>	<b>\$22,340,250</b>		

- SCW Funding received to date: \$1,837,425 (\$6,630,084 pending)
- May apply for O&M funding once the project is completed



# SCW Funding Reallocation Request

Year	SCW Funding	Phase	Efforts during Phase and Year
FY22-23	\$6,630,084	Construction	Construction and Construction Management
FY23-24 (Projected)	\$15,710,166	Construction	Construction and Construction Management
FY24-25 (Projected)	\$0	-	-
<b>TOTAL</b>	<b>\$22,340,250</b>		

- City would like to start construction, while full funding is required in advance (construction is delayed while the City waits for funding)
- City would like to ask the WASC to consider reallocating funds so that the remaining allocation can be obtained earlier



