Lynwood City Park Stormwater Capture Project

Infrastructure Program Fiscal Year 2024-2025 Lower Los Angeles River WASC Project Lead: City of Lynwood Presented by John Hunter Funding Request for Construction Project scored by Scoring Committee on 10/23/23

Project was Previously Awarded SCW Funds for Design (2020)

Project Overview

Regional stormwater infiltration and treatment project that includes installation of a new permeable parking lot, soccer field, and ephemeral stream

- Primary Objective:
 - Improve water quality within the Los Angeles River Watershed
 - Potentially increase water supply
- Secondary Objectives:
 - Enhance recreational opportunities and rehabilitate park facilities
 - Implement nature-based solutions
- Project Status: Construction
- Total Funding Requested: \$22,200,000 over 5 years for construction











The project has a total drainage area of 955 acres, encompassing portions of Lynwood (~351 acres) and South Gate (~604 acres)



The project contains multiple DACs within its drainage area and is itself located within a DAC



- Lynwood City Park was identified in the LLAR WMP (2015) as a priority regional project site
- The LLAR Watershed Management Group funded geotechnical testing (2016) and a feasibility study (2020)
- The LLAR WASC funded project design in FY 21-22 for \$1,691,629
- The project will improve stormwater quality, achieving progress toward compliance with the MS4 Permit and applicable TMDL milestones
- Local DACs will benefit from improved park utility and recreational facilities (e.g. soccer field with new turf grass, ephemeral stream with a bird/butterfly garden, native vegetation)



The project is part of the overall Stormwater Corridor approach being taken by the LLAR Watershed Management Group



- The City of Lynwood is the project lead, additional project collaborators are the City of South Gate and the Lower Los Angeles WMG
- Neighboring organizations have shown support of the project, including: Hosler Middle School, the Lynwood Neighborhood Block Watch Organization, and Lynwood Sports Association.
- The City of Lynwood is the landowner of the Lynwood City Park site.
- The Flood Control District provided a letter of conceptual approval for the project
- The City has not yet engaged the vector control district













- Project will divert flow from the storm drain and permeable pavement, then treat the flow through a series of baffle boxes and filters to remove sediment and trash
- Capture the water in a 10.3 ac-ft infiltration/storage gallery under the soccer fields
- Flow will also be diverted to an ephemeral stream and pond
- If both the infiltration gallery and ephemeral stream are full, treated flow will be discharged back into the storm drains



East Parking Lot



Soccer Fields



Bullis Road

WATER QUALITY IMPROVEMENT PRIMARY POLLUTANT (ZINC) 127 lb/yr (80%) POLLUTANT REDUCTION SECONDARY POLLUTANT (BACTERIA) 2.7 x 10¹⁴ MPN (98%) POLLUTANT REDUCTION Birch Diversion: 20 cfs DESIGN DIVERSION RATE Bullis Diversion: 25 cfs STORAGE CAPACITY FOR 10.3 acre-ft SUBSURFACE STORAGE (3.35 MG) STRUCTRE 24-HOUR CAPACITY 27.3 acre-ft CONSTRUCTION COST \$19.632.446 ESTIMATE

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Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Completed under prior design funding	\$143,187	08/2023
Design	Completed during previous design award	\$954,581	08/2024
Bid/Award	Bid Award and Ancillary Permitting	\$100,000.00	01/2025
Construction	Construction Survey	\$10,000	04/2025
Construction	Administration and Construction	\$20,000,000	12/2028
Construction	End of Project Close-out, Final Surface Improvements	\$2,089,998	06/2029
TOTAL		\$23,297,766	

- Description of Annual Costs: \$1,369,987
- Project Lifespan: 50 years & Lifecycle Cost: \$32,871,332



Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$8,880,000.00	Construction	selection of contractor(s) mobilization and initial construction
2	\$8,000,000.00	Construction	continued construction, construction administration and agency management
3	\$3,000,000.00	Construction	close out primary construction activities
4	\$2,186,502.00	Construction	Final construction activities, surface amenities, fine tuning equipment
5	\$133,498.00	Construction	final close out activities, initial monitoring, continued fine tuning of equipment
TOTAL	\$22,200,000.00		

• There may be O&M requests starting in Year 6

Score as confirmed by the Scoring Committee

Water Quality

Water Supply

Community Investment Benefits

Nature Based Solutions

Leveraged Funds and Community Support



The Scoring Committee revised the project score on 10/23/23.

Water Quality Benefits



Scored on 10/23/23

• Primary mechanisms:

Runoff/pollutant capture through two diversion points
Infiltration in the 10.3 ac-ft underground storage reservoir
Filtration through the ephemeral stream bioswale
Finally, discharge of treated flow to the storm drain

- Wet Weather Project
- Project will help the City of Lynwood and the over LLAR WMG achieve water quality improvement goals
- Tributary Area: 955 acres
- Capacity: 10.3 ac-ft
- Pollutant Reduction:

80% Reduction for Zinc (Limiting Pollutant)
98% Reduction for Bacteria (Category 1 Pollutant)

Community Investment Benefits and Nature Based Solutions



Scored on 10/23/23

• <u>Community Investment Benefits</u>

- Enhanced Park Space and Recreational Opportunities:
 - $\circ\,$ Removal and replacement of the parking lot and soccer field
 - Installation of a new ephemeral stream with bird and butterfly garden
- Reduced Heat Island Effect
 - Landscape plans include additional native vegetation
 - The ephemeral bioretention stream and associated bird and butterfly garden will increase the on-site native vegetation that will provide additional shade and cooling effects
- Nature Based Solutions
 - Ephemeral bioretention stream
 - Permeable pavement
 - Bioswales



Ephemeral Stream



Permeable Pavement

Leveraging Funds and Community Support (I)



Scored on 10/23/23

Leveraging Funds

- The LLAR Watershed Management Group provided funding for the Feasibility Study (including 10% design plans) and the preliminary geotechnical testing for the project
- <u>Community Support</u>
 - The project has received letters of support from the Lynwood Neighborhood Block Watch Organization, Lynwood Sports Association (LSA), and Fred W. Hosler Middle School

FRED W. HOSLER MIDDLE SCHOOL	LSA.
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Leveraging Funds and Community Support (II)



Scored on 10/23/23

- Community Support Outreach Conducted
 - City engaged the community at the Lynwood Earth Day event at the Ricardo Lara Linear Park (4/22/2023)
 - Project outreach flyers were provided in English and Spanish







Leveraging Funds and Community Support (III)



Scored on 10/23/23

- Community Support Outreach Plan
 - The current outreach during the design phase will continue through the end of 2023 with opportunities for community participation and feedback
 - The City will host community outreach/update meetings concurrent with the beginning of the project implementation
 - A Pre-Construction Community Meeting will be conducted to inform the residents of the construction activities including the schedule, haul routes, traffic controls, and other potential community impacts.
 - Construction signage will be on-site with the appropriate City representatives.

Questions?

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John Hunter

Oliver Galang