West Covina Regional Projects and Green Streets

Technical Resources Program (TRP)
Call for Project Fiscal Year 2023-2024

Watershed Area: Upper San Gabriel River
Project Lead(s): City of West Covina
Presenter Name(s): Paulina Morales, City of West Covina
Cameron McCullough, JLHA

Date: January 26, 2023
The City has identified potential locations and is requesting a feasibility study for regional projects and green streets within the City of West Covina.

<table>
<thead>
<tr>
<th>Project Overview</th>
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<tbody>
<tr>
<td><strong>Primary Objective:</strong> Improve water quality</td>
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<tr>
<td><strong>Secondary Objectives:</strong> Increase water supply, improve flood management, and increase and enhance green space</td>
</tr>
<tr>
<td><strong>Project Status:</strong> Concept planning</td>
</tr>
<tr>
<td><strong>Total SCW Funding Requested:</strong> $300,000</td>
</tr>
</tbody>
</table>
Potential Regional Projects:
• The City has various park locations that can work in conjunction with a green street location or standalone as a regional project.
  • Proposed - 3 Parks

Potential Green Street Projects:
• Streets adjacent to the parks have impervious medians (or space for medians) that could be greened with drought tolerant landscaping and could potentially capture on-site or regional flows.
  • Proposed - 6 Street segments
The requested feasibility study would include an initial review of the potential project locations.

This review would determine the best candidate(s) for a future SCWP Infrastructure Program application.

The feasibility study would then focus on the best candidates.
Project Location: Watershed Area (Upper San Gabriel River)

The potential projects drain to:
- Underground storm drains
- Walnut Creek Channel
- San Gabriel River
Regional project drainage areas range from 86 to 1,171 acres.

The feasibility study would review the potential projects and select a subset.
Project Details/Location: Orangewood and Cameron Park

• **Orangewood Park**
  - Drainage Area: up to 863 acres
    - City park with the largest upstream

• **Adjacent to:**
  - Walnut Creek Channel
  - Diversion storm drain
  - Sanitary sewer trunk line
Project Details/Location: Orangewood and Cameron Park

- **Cameron Park**
  - Drainage Area: 55 acres
  - Is a City park within the Orangewood Park drainage area
  - Adjacent to
    - Diversion storm drain
    - Sanitary sewer trunk line
Project Details/Location: Del Norte Park

• Del Norte Park
  • Drainage Area: 185 acre

• Adjacent to:
  • Diversion storm drain
  • Sanitary sewer trunk line
Project Details/Location: Streets – S of Walnut Creek

- Park-adjacent streets with median greening opportunities
  - Azusa Ave
  - Glendora Ave
  - Sunset Ave
  - Merced Ave
  - Vincent Ave
Project Details/Location:
Streets – N of Walnut Creek

- Park-adjacent streets with median greening opportunities
  - Azusa Ave
  - Sunset Ave
  - Vincent Ave
  - West Covina Pkwy
Summary of Project Benefits: **Water Quality and Flood Control**

- Regional runoff could be captured beneath parks, parking lots, and/or street medians with:
  - underground storage chambers,
  - dry wells, or
  - bioswales.

- This would capture pollutant loading in runoff therefore protecting the Walnut Creek Channel and San Gabriel River.

- It would also improve flood control.
Summary of Project Benefits: Water Supply

The captured regional runoff flows could augment the groundwater supply, if infiltration is feasible (Main San Gabriel Basin).

If infiltration is not feasible, the feasibility study would consider diversion to the sanitary sewer trunk lines, for possible use.

Some impervious areas would be replaced with drought tolerant landscaping and/or bioswales.

The feasibility study may also consider using captured runoff to supplement irrigation of the park and median.
Summary of Project Benefits: Nature-based Solutions

• Opportunity to:
  • Include bioswales in parks, parking lots, and streets, and
  • Improve existing turf and impervious surface by replacing with drought tolerant, native plant species.
Summary of Project Benefits: Community

- Enhanced green space in parking lots and streets (via replacement of existing impervious land with native plants and bioswales)

- Enhanced park amenities at project park sites (to be determined through the feasibility study)

- Improved flood protection
Summary of Project Benefits: Community

Disadvantaged Communities (DACs)

- Large portions of the City are in the top 25% of CalEnviroScreen 4.0 scores. This includes Orangewood Park and Del Norte Park.

- Source: Office of Environmental Health Hazard Assessment, on behalf of CalEPA
Project Status Update

Current Phase
Concept Planning

Future Phase
The City is expected to apply for design and/or construction SCW funding for this project upon completion of the Feasibility Study.
Project Selection and Development

• The Upper San Gabriel River Watershed Management Program (WMP) requires the City to implement stormwater capture projects within San Gabriel River’s Walnut Creek watershed.

• The WMP lists:
  • the implementation of both "green streets" and regional stormwater infiltration or capture/use projects as an optimal approach,
  • Orangewood Park and Cameron Park as potential regional BMP locations, and
  • The streets in the application as potential green street locations.
Project Details

• Located in West Covina on City-owned land and right-of-way.

• Underground systems may be situated in open space areas of the parks, parking lots, and medians.

• **Constraints**: Working in street and traffic impact

• **Alternatives**: Relocate (and downsize) project
## SCW Funding Allocations

<table>
<thead>
<tr>
<th>Year</th>
<th>SCW Funding</th>
<th>Phase</th>
<th>Efforts during Phase and Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY20-21</td>
<td>--</td>
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<td>--</td>
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<tr>
<td>FY21-22</td>
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</tr>
<tr>
<td>FY22-23</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>FY23-24 (Projected)</strong></td>
<td>$300,000.00</td>
<td>Planning and Design</td>
<td>Feasibility Study</td>
</tr>
<tr>
<td>FY24-25 (Projected)</td>
<td>--</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
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</table>
Finkbiner Park Multi-Benefit Stormwater Capture Project

Upper San Gabriel River WASC Project Update

Infrastructure Program
Call for Project Fiscal Year 2021-2022

Upper San Gabriel River Watershed

Project Lead: City of Glendora
Presenter Name: Oliver Galang (Craftwater Engineering)
Date: January 26, 2023
Primary Objective: Improve water quality within the Upper San Gabriel River Watershed

Secondary Objectives: Restore/rehabilitate park facilities

Project Status: SCW funding was awarded for the Design Phase

Total SCW Funding Received: $2.5 Million

Regional stormwater capture and infiltration facility located at Finkbiner Park beneath the open space of the existing park surface
### Project Location - Total Capture Area

#### Jurisdiction

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Area (acres)</th>
<th>% of Watershed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glendora</td>
<td>1,472</td>
<td>97.3%</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>9</td>
<td>2.7%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,512</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

#### Land-use

<table>
<thead>
<tr>
<th>Land-use</th>
<th>Area (acres)</th>
<th>% of Impervious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential</td>
<td>142</td>
<td>52.1%</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>9</td>
<td>3.3%</td>
</tr>
<tr>
<td>Institutional</td>
<td>34</td>
<td>12.3%</td>
</tr>
<tr>
<td>Industrial</td>
<td>25</td>
<td>9.3%</td>
</tr>
<tr>
<td>Secondary Roads &amp; Alleys</td>
<td>62</td>
<td>22.9%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>272</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
• **Benefits to DAC:**
  • Publicly accessible park space
  • Nearest DAC area is 2.12 miles
<table>
<thead>
<tr>
<th>Benefit Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Quality</td>
<td>Improvement in the Upper San Gabriel River by removing trash, metals, and nutrients in stormwater and urban runoff</td>
</tr>
<tr>
<td>Water Supply</td>
<td>Aquifer Recharge to the Main San Gabriel Basin</td>
</tr>
<tr>
<td>Community Investment</td>
<td>Park enhancements with proposed artificial turf sports field, soccer field, lighting, pedestrian walking paths adjacent to the Little Dalton Wash</td>
</tr>
<tr>
<td>Nature-Based Solutions</td>
<td>Green alley way improvement, recirculating stream, and DG walking paths</td>
</tr>
<tr>
<td>Leveraging Funds</td>
<td>Investigating grant opportunities for funding partnerships</td>
</tr>
<tr>
<td>Community Support</td>
<td>Community Pop-Up events, community surveys, and On-going outreach efforts</td>
</tr>
</tbody>
</table>
Project Details | LANDSCAPE PLAN

Green Alley

Baseball and Soccer Field

Recirculating Stream

Basketball Court
Project Details – Schematic Diagram

<table>
<thead>
<tr>
<th>Diversion Rate</th>
<th>Storage Capacity</th>
<th>24-Hour Capacity</th>
<th>Primary Pollutant Reduction (Zinc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 cfs</td>
<td>9.2 ac-ft (3 MG)</td>
<td>11.42 ac-ft</td>
<td>84% (60 lbs)</td>
</tr>
</tbody>
</table>
• Current Project Phase: DESIGN

• Project Design Activities
  • Additional Design Survey 11/30/2022
  • Geotechnical Investigation and Design recommendations Report completed 09/09/22
  • H&H Report with updated WMMS Modeling and Optimization 10/13/22
  • 60% Design Plans completed 11/21/22

• No concerns or delays to design schedule
Project Status Update: Outreach and Engagement

- Outreach and Engagement Plan developed on 07/20/22
- Outreach Flyers (Bilingual)
- Outreach Events conducted
  - Movie at the Park 8/5/22
  - Pop-Up at Soccer League on 10/1/22
  - Halloween Carnival 10/29/22
- Public Opinion Surveys with 432 responses
- Upcoming Events
  - February 18, 2023, Pop-up Event
  - Stakeholder Interviews: Kiwanis Club, Sports Council, and Rotary Club
Project Status Update: CEQA Status

• CEQA status
  • CEQA initiated in November 2022 and will be completed in September 2023
  • Regulatory Permitting to be completed in June 2024

• Estimated Start of Construction
  • Construction Documents and permitting could be completed in June 2024
  • The project could be ready for construction in September 2024

• SCW funding for Construction
  • Application for Construction Funding could be submitted for Round 6, FY 24-25
## Cost & Schedule

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Cost</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGN</td>
<td>Final Design (60/90/100)</td>
<td>$1,952,611</td>
<td>09/2023</td>
</tr>
<tr>
<td></td>
<td>Community Outreach during Design</td>
<td>$50,000</td>
<td>09/2023</td>
</tr>
<tr>
<td></td>
<td>Environmental Planning (CEQA) and Permitting</td>
<td>$156,000</td>
<td>06/2024</td>
</tr>
<tr>
<td></td>
<td>Agency Management (Design)</td>
<td>$382,000</td>
<td>09/2024</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
<td>Construction Cost</td>
<td>$15,580,335</td>
<td>09/2027</td>
</tr>
<tr>
<td></td>
<td>Construction Management and Design Support</td>
<td>$1,558,000</td>
<td>09/2027</td>
</tr>
<tr>
<td></td>
<td>Construction Survey</td>
<td>$20,000</td>
<td>09/2027</td>
</tr>
<tr>
<td></td>
<td>Agency Management (Construction)</td>
<td>$300,000</td>
<td>09/2027</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>Annual Costs</strong></td>
<td><strong>$19,998,946</strong></td>
<td></td>
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</tbody>
</table>

### Maintenance Cost:
- $105,000

### Operation Cost:
- $25,000

### Monitoring Cost:
- $15,000

### Project Life Span:
- 50
# SCW Funding Allocations

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</thead>
<tbody>
<tr>
<td>FY21-22</td>
<td>$1,290,644</td>
<td>Design</td>
<td>Professional Design Services, Community Outreach, Agency Project Management</td>
</tr>
<tr>
<td>FY22-23</td>
<td>$1,290,642</td>
<td>Design</td>
<td>Environmental Planning (CEQA) and Permitting, Professional Design Services, Community Outreach, Agency Project Management</td>
</tr>
<tr>
<td>FY23-24 (Projected)</td>
<td>$0</td>
<td>Design</td>
<td>Regulatory Permitting and Professional Design Services, Agency Project Management</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$2,581,286</td>
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<thead>
<tr>
<th>FUTURE FUNDING NEED</th>
<th>SCW Funding Request</th>
<th>Phase</th>
<th>Efforts during Phase and Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY24-25 (Projected)</td>
<td>$5,820,000</td>
<td>Construction</td>
<td>Construction Year 1</td>
</tr>
<tr>
<td>FY25-26 (Projected)</td>
<td>$5,820,000</td>
<td>Construction</td>
<td>Construction Year 2</td>
</tr>
<tr>
<td>FY26-27 (Projected)</td>
<td>$5,820,000</td>
<td>Construction</td>
<td>Construction Year 3</td>
</tr>
</tbody>
</table>
Questions?

Oliver Galang, PE
Craftwater Engineering, Inc
Fairplex Stormwater Capture

Infrastructure Program
Call for Project Fiscal Year 2021-2022
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)
Jorge Anaya

January 26, 2023
This project proposes an underground infiltration gallery to be located at the Fairplex

• **Primary Objective:** Capture stormwater to meet the MS4 Permit requirements and the East San Gabriel Valley Watershed Management Plan

• **Secondary Objectives:** Enhance water supply by providing opportunities for groundwater recharge through infiltration

• **Project Phases:** Planning and Design

• **Total SCW Funding Requested:** $2,900,000
- Located at 1101 W. McKinley Ave., Pomona, CA
- Upper San Gabriel Watershed
Existing Drainage Area

- Existing Drainage Area: 488 acres
- Serves Pomona and La Verne
- No Disadvantage Community Benefit
Project Details

• Divert runoff from Thompson Creek and Fairplex Drain

• Capture 31 ac-ft of stormwater runoff (24-hr, 85th percentile)

• Pre-treat using hydrodynamic separator

• Convey flows to an underground infiltration gallery for infiltration and groundwater recharge

• Emergency overflow pipe from infiltration gallery to Thompson Creek
Summary of Project Benefits

• **Water Quality (50 points – No change)**
  • 98% Primary (Copper) / Secondary (Zinc) Pollutant Removals

• **Water Supply (12 points – No change)**
  • 295.63 ac-ft/yr

• **Community Investment Benefits (2 points – No change)**
  • Enhance benefits by decreasing impact of non-point source pollutants that would typically discharge into Thompson Creek
  • Improve flood management
  • Restore and improve Grandstand Field (new location TBD)

• **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 LA County Fair Association
  • Conceptual support from LA County Flood Control District

• **Total Score: 73 (No change)**
Project Status Update

Potential Infiltration Gallery Locations

- Fairplex Specific Plan introduces regulatory controls for land use and zoning
- Critical Path - Fairplex Specific Plan:
  - Private/public land interphase
  - Leases and legal functionality
  - LA County authorizations and approvals
  - Draft Specific Plan ~ December 2023
  - Draft EIR ~ June 2024
  - Final EIR ~ October 2024
  - Land purpose and subdivision subject to change
- City continues to engage Fairplex and build partnership
  - Past meetings: April/August/November 2022
  - City prepared data share including utility data
  - City submitted a Project Summary Sheet to demonstrate project integration with site concepts
- **Current Project Phase:** Planning, Agency Coordination, Engagement and Outreach
- **Estimated Start of Design:** Summer 2023

Source: Fairplex Specific Plan Preliminary Concept 2022
### Cost & Schedule

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<th>Phase</th>
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<tbody>
<tr>
<td>Design</td>
<td>Includes engineering labor, lead agency’s costs, site investigations, agency coordination, easements, environmental, permits, outreach/engagement activities</td>
<td>$2,900,000</td>
<td>Spring 2025 (June 2024)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
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</tbody>
</table>

- Annual Costs: $30,000 (Maintenance), $5,000 (Operation), $5,000 (Monitoring)
- Project Lifespan: 30 years
- Lifecycle Cost: $32,647,640
## SCW Funding Allocations

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<tbody>
<tr>
<td>FY21-22</td>
<td>$2,900,000</td>
<td>Planning</td>
<td>Stakeholder coordination</td>
</tr>
<tr>
<td>FY22-23</td>
<td>-</td>
<td>Design</td>
<td>Stakeholder coordination/outreach Sustain partnership</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$2,900,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- SCW Funding received to date: $2,900,000
- Leveraged Funding amount: None