

Stormwater
Investment Plan
Upper San Gabriel
River Watershed
Area

Fiscal Year 2025-2026





Stormwater Investment Plan Upper San Gabriel River Watershed Area

The Stormwater Investment Plan (SIP) is an annual five (5) year plan developed by each Safe, Clean Water Program (SCWP) Watershed Area Steering Committee (WASC) that recommends funding allocations for Projects and Programs in the Regional Program's Infrastructure Program, Technical Resources Program, and Scientific Studies Program.

The purpose of the SIP is to capture recommended programming for the upcoming fiscal year as well as anticipated recommendations for the next four subsequent years.

The following sections include details regarding the recommended SIP:

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Attachments:

- Attachment A Final Recommended SIP
- Attachment B Summary to Date
- Attachment C Project Modification Requests Forms

Please review the recommended SIP and select one of the following:

Regional Oversight Committee (ROC) concurs with the recommended SIP as-is
Refer to ROC meeting minutes for comments

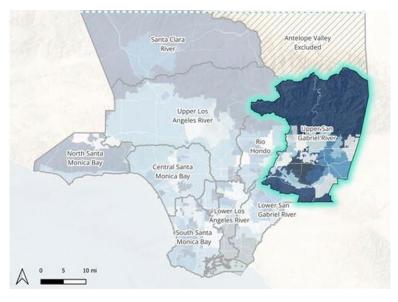
Upper San Gabriel River Watershed Area Background

The Upper San Gabriel River (USGR) Watershed Area is located in the eastern portion of Los Angeles County, including much of the Gateway Region, and is within LA County Supervisorial Districts 1 and 5. The watershed overlies the Main San Gabriel groundwater basin.

Waterways

The San Gabriel River begins in the San Gabriel Mountains where the East and West Fork converge. The main stem of the San Gabriel River is about 48 miles and the total length, including tributaries is about 75 miles. The San Gabriel River drains to the Pacific Ocean.

Cities & Demographics
The Watershed Area includes
20 municipalities and



unincorporated areas of Los Angeles County, including: Baldwin Park, Duarte, Glendora, City of Industry, West Covina, Diamond Bar, Claremont, Azusa, La Verne, Walnut, Irwindale, La Puente, El Monte, Duarte, South El Monte, Arcadia, Bradbury, Monrovia, Pomona, San Dimas, and Covina. Demographics in the Watershed Area vary greatly with an average poverty percentage of 10% across municipalities, ranging from a minimum of 5.5% and a maximum of 21%. The region is diverse, with a large portion of individuals identifying as Hispanic/Latino or Asian.

"The USGR WASC is proud of the significant investments made to date and encouraged to see construction begin for some of the projects funded in earlier years. The Committee has encouraged project applicants to seek leverage funds, especially in the context of Project Modification Requests. As the Program progresses, the WASC is supportive of streamlined pathways that help projects meet urgent compliance deadlines and provide multi-benefits to the areas in most need."

-USGR WASC Chair Julie Carver

1 Executive Summary

The USGR WASC requests that the ROC advance the recommended Fiscal Year 2025-2026 (FY25-26) SIP to the Board of Supervisors for approval. The recommended SIP includes funding for four new scientific studies (SS), all continuing projects including two Project Modification Requests (PMRs) with additional funding requests, and the Watershed Coordinator. The recommended SIP allocates 93% of available funding in FY25-26 (Table 1-1).

The included Projects were selected based on information drawn from applications and proponent presentations, and robust discussion of Project benefits, anticipated future funding requests, and available funding. The recommended SIP addresses the required funding thresholds including ratio of funding allocated to Infrastructure Program (IP) Projects, Technical Resources Program (TRP) Project concepts, and SS (Table 4-1) and the required disadvantaged community benefits ratio of 22% (Table 4-2).

During deliberations, the WASC discussed that a higher funding allocation for FY25-26 will result in limited available funding for new and ongoing Projects that may return for construction and O&M costs. The WASC acknowledged more funding flexibility for FY26-27 and onward to fund these requests.

Four key topics were the focus of the WASC:

- Individual discussions after each proposed application, followed by a quick straw poll for committee preference
- The impact of delayed projects on rising costs for construction
- Revisiting the requirement for leveraging funds in project applications, especially in the context of PMRs
- PMRs for SS that expand the scope and a potential process for establishing a third-party scientific review for these requests

During the March 27, 2025 meeting, the WASC voted to approve the recommended SIP with 11 votes in favor, 1 opposed, 1 in abstention, and 0 absent at time of vote. Meeting minutes are available here with in depth summary of the deliberation and vote.

1.1 Summary of Anticipated Benefits

Development of additional project benefit metrics are currently being incorporated through ongoing adaptive management efforts, including updates to the Reporting and Application

Modules and Initial Watershed Planning. Based on the best available data, the following anticipated benefits are expected to be created through the SIP:

Area managed by Projects: 7,348 acres

• Project Storage Capacity: 158 acre-feet

Annual Average Stormwater Capture: 2,612 acre-feet

Table 1-1 Summary of SIP FY25-26 Allocations

SIP Allocations						
	FY25-26 Budget	FY26-27 Projection	FY27-28 Projection	FY28-29 Projection	FY29-30 Projection	Totals
Anticipated Available Funds	\$21.7M	\$20.1M	\$29.3M	\$47.5M	\$65.7M	-
Total Allocated to IP	\$18.1M	\$8.6M	\$0	\$0	\$0	\$26.7M
Total Allocated to SS	\$1.9M	569k	\$202k	\$211k	\$0	\$2.8M
Total Allocated to TRP	\$200k	\$200k	\$200k	\$200k	\$200k	\$1M
Total Allocation	\$20.2M	\$9.3M	\$402k	\$411k	\$200k	\$30.6M
Percent Allocated	93%	46%	1%	1%	0%	-

¹Anticipated Available funds includes annual regional program funds collected, carryover from previous SIPs, and unused funds returning to the Watershed Area.

Refer to Attachment A or the <u>SIP tool</u> for the Final Recommended SIP with additional project details.

Below is a summary of the total funding allocated to projects in the recommended SIP, including both new projects and previously approved projects.

1.2 Newly Submitted Projects, Studies, and Concepts

The recommended SIP includes full funding for all 4 of the submitted SS. More detail about the considered SS is provided in Section 6.

Table 1-2 Summary of New Funding Allocations in Recommended SIP

	New Funding Allocations					
Submitted	Included in SIP	Funded project name	Funding Allocations FY25-30	Program		
0	0	(There was no Call for Projects for Infrastructure Program in FY25-26)	-	Infrastructure Program (IP)		
0	0	(No TRP were submitted in this watershed area for FY25-26)	-	Technical Resources Program (TRP)		
4	4	Data-Driven Resource Optimization and Planning System for Los Angeles County	\$49,112	Scientific Studies (SS)		
		DepaveLA: Prioritizing Parking Lots for Green Retrofitting	\$250,002			
		Hardscape and Brownfield Transformation Opportunity Study	\$253,400			
		Next Gen Bioretention: Towards Living and Adaptive Stormwater Systems for a Resilient Los Angeles Count	\$466,248			
4	4		\$1,018,762	Total		

1.3 Continuing Projects and Studies

The recommended SIP includes funding for all continuing projects, including 3 continuing IPs, 3 continuing SS, and TRP funding for the Watershed Coordinator. Continuing Project and Scientific Study Developers represent 2 municipalities, 1 university, and 3 agencies. Below is a summary of continuing projects and anticipated total funding remaining between FY25-30. Additional details about anticipated project benefits are included in Table 2-1.

Table 1-3 Summary of Continuing Projects and Studies in Recommended SIP

Table 1-3 Summary of Co	Continuing Projects and Studies					
Funded project name	Project Developer	Anticipated total remaining FY25-30	Program			
Finkbiner Park Stormwater Capture Project, Construction	City of Glendora	\$12,224,164	Infrastructure Program (IP)			
Bassett High School Stormwater Capture Multi- Benefit Project	Los Angeles County	\$10,000,000				
Encanto Park Stormwater Capture Project	City of Monrovia	\$4,483,692				
USGR Watershed Coordinator	Los Angeles County Flood Control District	\$1,000,000	Technical Resources Program (TRP)			
Identifying Best Practices for Maintaining Stormwater Drywell Capacity	California State Polytechnic University, Pomona	\$822,206	Scientific Studies (SS)			
Maximizing Impact of Minimum Control Measures	San Gabriel Valley Council of Governments	\$479,469				
Regional Pathogen Reduction Study	Gateway Water Management Authority	\$519,882				
Total		\$29,529,353				

1.4 Project Modification Requests (PMRs)

The USGR WASC received one consistent PMR and two inconsistent PMRs. The two inconsistent PMRs are for one IP project and one scientific study, both of which requested additional funding. The final SIP recommends approval of a portion of the additional funding request for the IP project and the full additional funding request for the scientific study.

Table 1-4 Summary of PMR Submissions and Additional Funding Awards

	PMR Submissions*					
Project name	Modification Details	Original funding award	Additional funding request	New funding total – WASC approved		
Glendora Avenue Green Streets	Consistent – Schedule update	N/A	N/A	N/A		
Encanto Park Stormwater Capture Project	Inconsistent – functionally equivalent BMP modification, change in amount of leverage funding, increased funding request	\$2,482,248	\$4,983,692 (+201% increase)	\$6,965,940		
Maximizing Impact of Minimum Control Measures	Inconsistent – improved scope/benefits, increase funding request	\$393,109	\$479,469 (+122% increase)	\$872,578		
Total		\$2,875,357	\$5,463,161 (+190% increase)	\$7,838,518		

^{*}For more information on PMRs, see Section 3.

Consistent – PMR consistent with previously approved SIP Inconsistent – PMR inconsistent with previously approved SIP

2 Projected Watershed Area Benefits

Below is a summary of the estimated aggregate benefits for Infrastructure Program (IP) Projects included in the approved FY20-21, FY21-22, FY22-23, FY23-24, FY24-25, and recommended FY25-26 SIP.

Table 2-1. Summary of estimated benefits for IP Projects to date

Table 2-1. Sulfillary of estillated beliefits for it Projects to date					
Number of IP Projects Providing Benefits					
Stormwater Bene	fits				
7,348	Area Managed by Projects (acres)				
158	Project Storage Capacity (acre-feet)				
2,612	Annual Average Stormwater Capture (acre-feet)				
1.84 Dry Weather Inflow to Projects (cubic feet per sec)					
Primary Pollutant	Primary Pollutant Addressed				
10	Zinc				
0	Bacteria				
0	Nitrogen				
4	Other*				
Water Supply Benefits					
11	Connected to Aquifer				
0	Sends to WW Treatment Plant for Reuse				

	Number of IP Projects Providing Benefits				
1	Uses Water Onsite				
Community Inves	tment Benefits				
10	Reduces Heat Island Effect				
10	Provides Recreational Opportunities				
11	Increases Shade and Trees				
10	Improves Flood Protection				
2	Improves Waterways Access				
11	Enhances Habitat or Park Space				
3	Enhances Green Spaces at Schools				
Nature-Based So	lutions				
14	Mimics Natural Processes				
11 Uses Natural Materials					
Leveraging Funds					
7	Leverages Shared Funds				

^{*}Primary Pollutant Addressed does not apply to Dry Weather Projects. Therefore, Dry Weather Projects are categorized as "Other".

3 SIP Deliberation Process

The Call for Projects for FY25-26 funding ended on July 31, 2024. Facilitated by Los Angeles County Public Works (PW) staff, the WASC held 7 meetings between July 2024 and March 2025, at which they discussed and reviewed all necessary items to ultimately develop their recommended FY25-26 SIP. Refer to the Upper San Gabriel River WASC webpage for the current list of WASC members, meeting dates, and meeting materials. Refer to the Upper San Gabriel River WASC Archive webpage for all past meeting information and materials.

3.1 Summary of Meetings

3.1.1 July 25, 2024

The SCWP Watershed Planning staff facilitated a <u>workshop</u> in which WASC members identified strategies they would like to see implemented through future Projects and Studies to meet SCWP goals in the USGR Watershed Area.

For more information, refer to the July 25, 2024 Meeting Minutes.

3.1.2 August 22, 2024

The WASC received a <u>WASC Roles and Responsibilities</u> presentation that informed new members, and reminded returning members, of their obligations and goals as members of the WASC.

The Watershed Coordinator provided an update of the <u>USGR Strategic Outreach and</u> Engagement Plan (SOEP) for FY24-25.

For more information, refer to the <u>August 22, 2024 Meeting Minutes</u>.

3.1.3 October 24, 2024

The WASC received a <u>summary of FY23-24 Quarter 1 and Quarter 2 progress and expenditure reports</u>.

The WASC voted to select new co-chairs (Julie Carver and Fernando Villaluna).

For more information, refer to the October 24, 2024 Meeting Minutes.

3.1.4 December 16, 2024

The Watershed Coordinator provided an <u>overview of the five Scientific Studies</u> <u>applications</u> submitted for FY25-26 Call for Projects.

The WASC continued their review of <u>summary of FY23-24 Quarter 1 and Quarter 2</u> progress and expenditure reports.

The WASC received an <u>overview of the Project Modification Request</u> (PMR) process based on the <u>Project Modification Guidelines</u>.

For more information, refer to the December 16, 2024 Meeting Minutes.

3.1.5 January 23, 2025

The WASC received presentations from the 4 submitted Scientific Study applicants:

- Data-<u>Driven Resource Optimization and Planning System (DROPS)</u>
- Depave LA: Prioritizing Lots for Green Retrofitting
- Hardscape and Brownfield Transformation Opportunity Study
- Next Gen Bioretention: Towards Living and Adaptive Stormwater Systems for a Resilient Los Angeles County

Each applicant was allotted 10 minutes of presentation time with 10 minutes for questions and answers; additional time for presentation or Q&A was accommodated when necessary.

For more information, refer to the <u>January 23, 2025 Meeting Minutes</u>.

3.1.6 February 27, 2025

The WASC received a Peer Review Summary of FY25-26 Scientific Studies, where CASC Engineering evaluated objectives, technical approaches, and whether each of the Studies met the goals of the SCWP.

- <u>Data-Driven Resource Optimization and Planning System (DROPS) FY25-26</u>
 <u>Peer Review Summary</u>
- Depave LA: Prioritizing Parking Lots for Green Retrofitting FY25-26 Peer Review Summary
- Hardscape and Brownfield Transformation Opportunity Study
- Next Gen Bioretention: Towards Living and Adaptive Stormwater Systems for a Resilient Los Angeles County – FY25-26 Peer Review Summary

The WASC continued their discussion on the PMR process and received summary of determinations on each PMR submitted. Two PMR forms were submitted for previously approved Projects and one PMR form was submitted for previously approved Scientific Study. Each PMR form was reviewed by PW staff and determined either consistent or inconsistent with the approved SIP. Ultimately, 1 PMR form was deemed consistent (Glendora Avenue Green Streets) with the approved SIP, while the 2 were deemed inconsistent (Encanto Park Stormwater Capture Project and Maximizing Impact of Minimum Control Measures). PMRs that were deemed consistent with the approved SIP required no further action from the WASC. PMRs that were determined inconsistent with the approved SIP were returned to the WASC for discussion on inclusion in the pending SIP as described in Section 7 Previously Approved Projects, Project Concepts, and Studies.

- The PMR submitted by the City of Glendora for the <u>Glendora Avenue Green</u> <u>Streets</u> was deemed consistent by PW staff as their proposed modification was a schedule change that did not significantly impact the funded activity completion date.
- The PMRs deemed inconsistent were due to increases in funding requested. The
 City of Monrovia's <u>Encanto Park Stormwater Capture Project</u>, originally funded
 for \$2.4M, requested an additional \$4.9M. The San Gabriel Valley Council of

Governments' <u>Maximizing Impact of Minimum Control Measures</u>, originally funded for \$393.1k, requested an additional \$479.5k. The Project Developer for <u>Encanto Park Stormwater Capture Project</u> cited inflation as the reason for their modified request. The Project Developer for <u>Maximizing Impact of Minimum Control Measures</u> is proposing a modification to develop additional field data to verify and justify model representation of street sweeping activities and associated pollutant reductions achieved.

For more information, refer to the <u>February 27, 2025 Meeting Minutes</u>.

3.1.7 March 27, 2025

The WASC received a <u>summary and presentation of FY23-24 Quarter 3 and Quarter 4</u> <u>progress and expenditure reports</u> that showcased a more streamlined process for reviewing progress and expenditure reports from continuing Projects and Studies.

The WASC deliberated on the SIP. Ahead of this meeting, PW Staff provided WASC members with a <u>Summary of Resources for FY25-26 USGR SIP</u>, which included links to all information discussed in meetings that helped them have a robust discussion and make an informed decision. WASC members provided preliminary rankings of the New Studies and PMRs under consideration via an online survey. The results are summarized in the tables below and were intended to set a starting point for SIP deliberations.

Table 3-1. Preliminary WASC Scientific Studies rankings

Program	Study Name	Number of Committee Rankings	Points*	Program Place
SS	Next Gen Bioretention: Towards Living and Adaptive Stormwater Systems for a Resilient Los Angeles County	15	50	1
SS	Data-Driven Resource Optimization and Planning System (DROPS) for Los Angeles County	13	32	2
SS	Depave LA: Prioritizing Parking Lots for Green Retrofitting	13	31	3
SS	Hardscape and Brownfield Transformation Opportunity Study	14	28	4

*Note: These values are NOT project scores but rather a weighted representation of the committee's preliminary rankings to help prioritize funding considerations and discussion.

Table 3-2. Preliminary WASC PMR rankings

Program	Project Name	Number of Committee Rankings	Points*	Program Place
PMR (IP)	Encanto Park Stormwater Capture Project	14	23	1
PMR (SS)	Maximizing Impact of Minimum Control Measures	14	19	2

*Note: These values are NOT project scores but rather a weighted representation of the committee's preliminary rankings to help prioritize funding considerations and discussion.

The WASC held an in-depth discussion, which included many follow-up questions of the Study applicants and PMR Developers, and deliberated on several different scenarios on the SIP Tool.

Ultimately, the WASC recommended funding all four of the new Scientific Studies (Data-Driven Resource Optimization and Planning System (DROPS) for Los Angeles County; Depave LA: Prioritizing Parking Lots for Green Retrofitting; Hardscape and Brownfield Transformation Opportunity Study; Next Gen Bioretention: Towards Living and Adaptive Stormwater Systems for a Resilient Los Angeles County). The WASC also decided to include one partial PMR (Encanto Park Stormwater Capture Project) and one full PMR (Maximum Impact of Minimum Control Measures) for the additional funding requested.

For more information, refer to the March 27, 2025 Meeting Minutes.

3.2 Summary of Public Comment

The WASC received public comments which are available in the WASC meeting minutes on the <u>Safe, Clean Water website</u>. The WASC received one public comment card with opposition to the Maximizing Impacts of Minimum Control Measures PMR, noting that the study is nearly complete and that the proposed modification should be submitted as a new Scientific Study application. The WASC received a public comment in support of the Hardscape and Brownfield Transformation Opportunity Study for their focus on hardscape removal and greening of schoolyards in the County.

4 Infrastructure Program

4.1 Discussion of Criteria

As noted in previous sections, new Infrastructure Program applications were not accepted for FY25-26. Only continuing Infrastructure Program Projects from previously approved SIP are included in this final recommended SIP. Per LACFCD Code Ch18.07.B.2, the SIPs shall be developed by the WASC in accordance with the criteria described below.

4.1.1 Regional Program Allocations

Compliant with LACFCD Code Ch18.07.B.2.a

Below is a summary of the Regional Program allocations over the 5-year SIP, which includes previously approved projects.

Table 4-1. Regional Program allocations over the 5-year SIP

Funding Program	Total SCWP Funding Allocated FY25-30	Funding Distribution for Subprograms FY25-30*
Infrastructure Program (≥85%)	\$26,707,856.00	28.7%
Scientific Studies (<5%)	\$2,840,259.00	3.1%
Technical Resources Program (<10%)	\$1,000,000.00	1.1%
Grand Total	\$30,548,115.00	

*Note: The funding distribution for the Infrastructure Program is based off of the total funding allocated over the 5-year period. The funding distributions for Scientific Studies and Technical Resources Program are based on the total revenue collected for the 5-year period.

4.1.2 Disadvantaged Communities (DAC) Benefits

Compliant with LACFCD Code Ch18.07.B.2.c.

Based on the total Infrastructure Program funding allocations for the SIP and the ratio of the DAC population to the total population in each Watershed Area, funding for Projects that provide DAC Benefits over the 5-year SIP shall not be less than the value shown below. Below is an overview of Funding Allocated for DACs from FY25-30.

Table 4-2. Funding allocated for DACs over the 5-year SIP

Disadvantaged Community (DAC) Allocation			
Required DAC Ratio	22%		
Required Funding for DACs FY25-30 (110%)	\$6,598,442.90		
Funding Allocated for DACs FY25-30	\$14,483,692.00		

^{*}Note: These figures are based on the 2020 US Census and will be updated periodically.

As shown, the total Safe, Clean Water Funds benefiting DACs over a rolling 5-year period for the recommended SIP is greater than the required funding for DACs for this Watershed Area. To better assist with and standardize this determination in the future, the District updated interim guidance for implementing Disadvantage Community Policies in the Regional Program. Interim guidance is available on the SCWP website.

4.1.3 Leveraged Funds and Community Support

Although Infrastructure Program applications were not accepted for FY25-26, Project Developers for continuing projects continue to seek leveraged funding opportunities to complement SCWP funding.

4.1.4 Long Term Planning Considerations

The WASC incorporated long term planning by considering anticipated future construction costs for previously approved projects during SIP development. In the past, future anticipated construction costs were estimated and confirmed by project applicants. This year, an enhanced hypothetical scenario was developed that includes potential construction costs and Operation and maintenance (O&M) for projects that have only been funded for design, inflation costs, and a 50% assumption of leveraged funds. Actual future SCWP funding requests for construction may differ due to updated project estimates, leveraged funding, awarded grants, or local match.

In addition, the annual O&M projections provided in the Project applications for previously approved Projects were included in the SIP Tool and shown below. The recommended SIP anticipates a total annual O&M cost of \$1.6M of the anticipated \$18.6M annual Regional Program funds collected and will be accounted for in future SIPs.

Below is a summary of the total funding allocated per year in the recommended SIP, including estimated construction costs for previously approved projects. This represents the theoretical SIP projections based on currently anticipated additional funding requests to cover subsequent phases.

	Budget	Projections					
	FY25-26	FY26-27	FY27-28	FY28-29	FY29-30	TOTAL	Annual O&M
A.1 Anticipated Annual Regional Program Funds Collected	\$18.6M	\$18.6M	\$18.6M	\$18.6M	\$18.6M	\$92.9M	
A.2 Carryover from Previous SIP	\$3.1M	\$1.5M	\$-4.4M	\$3.1M	\$10.2M		
A.3. Removed Projects and Unused TRP Funds 🚯	\$42.6k	\$0	\$0	\$0	\$0		
A. Anticipated Regional Program Funds Available (A.1 + A.2 + A.3) 🟮	\$21.7M	\$20.1M	\$14.2M	\$21.7M	\$28.8M		
B.1 Total Allocated in Previous SIP(s)	\$19.5M	\$24.1M	\$11.1M	\$11.5M	\$2.9M	\$69.1M	\$1.6M
B.2 Total Recommendation in Current SIP	\$655k	\$363k	\$0	\$0	\$0	\$1M	\$0
B. Total Allocated and Recommendation in SIP (B.1 +B.2) 📵	\$20.2M	\$24.5M	\$11.1M	\$11.5M	\$2.9M	\$70.1M	Total: \$1.6M
C. Carryover in Current SIP (A - B)	\$1.5M	\$-4.4M	\$3.1M	\$10.2M	\$25.9M		
D. Percent Allocated (B / A) 📵	93%	122%	78%	53%	10%	73%	

Note: This is not the recommended SIP.

A is the sum of Total Anticipated Annual Regional Program Funds Available and B is the sum of Total Recommended in Current SIP and Total Allocated in Previous SIP(s).A

C is the Remaining Balance.

Figure 4-1. SIP Tool final funding scenario annual budget, including theoretical construction and O&M costs with leveraged funding for FY25-30.

Refer to the <u>SIP tool</u> or the "Final -3/27/25 with Potential Future IP Costs" scenario. As shown in the theoretical SIP, other funding sources will be required to bring all projected Projects to completion, and most of the members in the WASC were confident in the Watershed Area's ability to do so. If unable to do so, the WASC understands they will need to defer the construction of certain Projects to occur in later years.

4.1.5 Other Considerations

As previously noted, the SCWP did not accept any applications for the Infrastructure Program for FY25-26. The only Infrastructure Program Projects included in the SIP are those continuing Projects that were earmarked funds in FY25-30 in previous SIP's. The WASC had several opportunities to inquire about the status of these Projects. The WASC was presented progress report summaries for these Projects at both the October 24, 2024 and March 27, 2025 meetings. Project Developers were present at both meetings to respond to any questions or concerns from the WASC. For more details on these Projects, see Section 7.

5 Technical Resources Program

Per LACFCD Code Ch18.07.D, the purpose of the Technical Resources Program is to provide Technical Assistance Teams to assist with the development of Feasibility Studies and to provide Watershed Coordinators.

5.1 Submitted and Recommended Project Concepts

There were no Project concepts submitted to the FY25-26 Technical Resources Program for this Watershed Area. A placeholder to fund one Watershed Coordinator for up to for \$200k/year was included in the recommended SIP.

5.2 Discussion

The WASC did not receive any Technical Resources Program applications. The WASC recommended funding 1 Watershed Coordinator.

6 Scientific Studies Program

Per LACFCD Code Ch18.07.E, the purpose of the Scientific Studies Program is to provide funding for scientific and technical activities.

6.1 Submitted and Recommended Studies

Below is a list of all Scientific Studies submitted to the FY25-26 Scientific Studies Program for this Watershed Area. Studies shown in white have been included in the recommended SIP.

Table 6-1. Summary of submitted and recommended Scientific Studies for FY25-26

Project Name	Project Developer	Included in SIP	Total Funding Allocated in this WASC
Data-Driven Resource Optimization and Planning System (DROPS) for Los Angeles County	Foothill Municipal Water District	Included in SIP	\$49,112.00
Depave LA: Prioritizing Parking Lots for Green Retrofitting	Council for Watershed Health	Included in SIP	\$250,002.00
Hardscape and Brownfield Transformation Opportunity Study	San Gabriel Valley Council of Governments	Included in SIP	\$253,400.00
Next Gen Bioretention: Towards Living and Adaptive Stormwater Systems for a Resilient Los Angeles County	TreePeople	Included in SIP	\$466,248.00

Refer to Attachment A or the SIP Tool for the Final Recommended SIP with additional scientific study details.

6.2 Discussion

The WASC received presentations from the Scientific Studies Program applicants during the WASC meetings on January 23, 2025. The District hired CASC Engineering to provide independent, rapid, and unbiased evaluation (summary) of the technical adequacy of each scientific study proposal, which were shared with the project applicants and WASC members. The WASC decided to recommend funding Data-Driven Resource Optimization and Planning System (DROPS), Depave LA: Prioritizing Parking Lots for Green Retrofitting, Hardscape and Brownfield Transformation Opportunity Study and Next Gen Bioretention: Towards Living and Adaptive Stormwater Systems for a Resilient Los Angeles County.

7 Previously Approved Projects, Project Concepts, and Scientific Studies

All previously approved Projects, Project concepts, and Studies were evaluated as described above in Section 3 Summary of Meetings and Process.

PW received 3 PMR forms from previously approved Projects and Studies for this Watershed Area. Please refer to the <u>PMR Guidelines</u> for more details.

Below are lists of previously approved Infrastructure Program Projects, Technical Resources Program Project concepts, and Scientific Studies recommended in the SIP for this Watershed Area. Projects, Project concepts, and Studies that are still active and continuing as previously approved are shown in white.

Table 7-1. Summary of previously approved Infrastructure Program Projects

Project Name	Project Developer	SIP Year	Status of Funded Activity	Phase(s)	Remaining Funding Request
Encanto Park Stormwater Capture Project	City of Monrovia	FY20-21	Continuing with Modifications	Design, Construction	\$4,483,692.00
Barnes Park	City of Baldwin Park	FY20-21	Continuing	Design, Construction	\$0.00
Garvey Avenue Grade Separation Drainage Improvement Project	City of EI Monte	FY20-21	Continuing	Design, Construction, O & M	\$0.00
Bassett High School Stormwater Capture Multi-Benefit Project	Los Angeles County	FY20-21	Continuing	Design, Construction	\$10,000,000.00

Project Name	Project Developer	SIP Year	Status of Funded Activity	Phase(s)	Remaining Funding Request
Pedley Spreading Grounds	East San Gabriel Valley Water- shed Manage- ment Group (City of San Dimas, City of Claremont, City of Pomona, City of La Verne)	FY20-21	Continuing	Design, Construction	\$0.00
Wingate Park Regional EWMP Project	City of Covina	FY20-21	Continuing	Design, Construction	\$0.00
Finkbiner Park Stormwater Capture Project	City of Glendora	FY21-22	Continuing	Design	\$0.00
Fairplex	East San Gabriel Valley Watershed Manage- ment Group	FY21-22	Continuing	Construction, Design	\$0.00
Lone Hill Park	East San Gabriel Valley Watershed Manage- ment Group	FY21-22	Continuing	Construction, Design	\$0.00
Zamora Park Renovation Project	City of El Monte	FY21-22	Continuing	Construction, O & M	\$0.00

Project Name	Project Developer	SIP Year	Status of Funded Activity	Phase(s)	Remaining Funding Request
Marchant Park	East San Gabriel Valley Watershed Manage- ment Group	FY22-23	Continuing	Design	\$0.00
Pelota Park	East San Gabriel Valley Watershed Manage- ment Group	FY22-23	Continuing	Design	\$0.00
Glendora Avenue Green Streets	City of Glendora	FY22-23	Continuing with Modifications	Design, Planning	\$0.00
Finkbiner Park Stormwater Capture Project, Construction Phase	City of Glendora	FY24-25	Continuing	Construction	\$12,224,164.00

Table 7-2. Summary of previously approved TRP Project Concepts

Project Name	Project Applicant	SIP Year	Status of Feasibility Study	Notes
Upper San Gabriel River Watershed Coordinator	Los Angeles County Flood Control District	FY20-21	Continuing	N/A
MacLaren Hall Property Park and Sports Fields Project	City of EI Monte	FY20-21	Complete	Submitted to Infrastructure Program FY22- 23 and Withdrawn by Applicant

Project Name	Project Applicant	SIP Year	Status of Feasibility Study	Notes
Glendora Avenue Green Street Feasibility Study	City of Glendora	FY20-21	Complete	Submitted to Infrastructure Program FY22- 23 and Approved
Sunset Crossing Park Multi-Benefit Stormwater Project	City of Diamond Bar	FY21-22	Withdrawn	Withdrawn by applicant before TRP completion
West Covina Regional Projects and Green Streets	City of West Covina	FY23-24	Continuing	Feasibility Study Under Development

Table 7-3. Summary of previously approved Scientific Studies

Project Name	Project Developer	SIP Year	Remaining Funding Requested	SIP Status
San Gabriel Valley Regional Confirmation of Infiltration Rates	East San Gabriel Valley Watershed Management Group (City of San Dimas, City of Claremont, City of Pomona, City of La Verne)	FY20-21	\$0.00	Complete
Regional Pathogen Reduction Study	Gateway Water Management Authority	FY21-22	\$519,822.00	Continuing
Community Garden Stormwater Capture Investigation	Los Angeles Community Garden Council	FY22-23	\$0.00	Complete

Project Name	Project Developer	SIP Year	Remaining Funding Requested	
Maximizing Impact of Minimum Control Measures	San Gabriel Valley Council of Governments	FY22-23	\$479,469.00	Continuing with Modifications
Identifying Best Practices for Maintaining Stormwater Drywell Capacity	California State Polytechnic University, Pomona	FY24-25	\$822,206.00	Continuing

8 Next Steps

To best accelerate the effective adaptive management of the SCWP and ensure the most strategic investments going forward, certain new efforts must be prioritized, while certain existing efforts must be modified so that they can proceed according to evolved information, best practices, and tools. Doing so is a critical aspect for advancing the recently adopted County Water Plan's vision of a shared, inclusive, regional path forward to achieve safe, clean, and reliable water resources sustainably and equitably for Los Angeles County.

PW continues to develop guidance documents, as part of adaptive management efforts, to further inform and support the annual SIP development process. Various tools are regularly updated and maintained to assist with the WASC's decision making. PW is advancing regional and watershed-based planning through the development of Initial Watershed Plans and an online planning tool. The Initial Watershed Plans build upon the SCWP's foundation and support future strategic decision making. The plans align with broader regional and local planning efforts; and will establish baseline of benefits, set quantitative targets, and define tailored strategies and opportunities. Committee members, Municipalities, Project and Program proponents and other interested parties will have the opportunity to use the Plans upon their release in early 2026.

The WASC requests the Regional Oversight Committee (ROC) to advance the recommended SIP to the Board of Supervisors for approval.

Next WASC meeting(s):

- July 24, 2025 from 1:30 pm 3:30 pm (to consider ROC feedback, if available)
- Additional meeting to be scheduled to consider ROC feedback, if necessary.

Attachment A Final Recommended SIP

Watershed Area	Upper San Gabriel River
Included in SIP?	Yes

Row Labels	Project Lead	DAC	FY 25-26 Budget	FY 26-27 Projection	-	FY 28-29 Projection	FY 29-30 Projection	Anticipated SCW Funding FY 25-30
FY20-21								
Infrastructure Project			\$12,027,754.00	\$2,455,938.00	\$0.00	\$0.00	\$0.00	\$14,483,692.00
Bassett High School Stormwater Capture Multi-Benefit Project	Los Angeles County	Yes	\$10,000,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,000,000.00
Encanto Park Stormwater Capture Project	City of Monrovia	Yes	\$2,027,754.00	\$2,455,938.00	\$0.00	\$0.00	\$0.00	\$4,483,692.00
Technical Resource			\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$1,000,000.00
Upper San Gabriel River Watershed Coordinator WC: TBD	Los Angeles County Flood Control District	No	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$1,000,000.00
FY21-22								
Scientific Study			\$519,822.00	\$0.00	\$0.00	\$0.00	\$0.00	\$519,822.00
Regional Pathogen Reduction Study	Gateway Water Management Authority	No	\$519,822.00	\$0.00	\$0.00	\$0.00	\$0.00	\$519,822.00
FY22-23								
Scientific Study			\$479,469.00	\$0.00	\$0.00	\$0.00	\$0.00	\$479,469.00
Maximizing Impact of Minimum Control Measures	San Gabriel Valley Council of Governments	No	\$479,469.00	\$0.00	\$0.00	\$0.00	\$0.00	\$479,469.00
FY24-25								
Infrastructure Project			\$6,112,082.00	\$6,112,082.00	\$0.00	\$0.00	\$0.00	\$12,224,164.00
Finkbiner Park Stormwater Capture Project, Construction Phase	City of Glendora	No	\$6,112,082.00	\$6,112,082.00	\$0.00	\$0.00	\$0.00	\$12,224,164.00
Scientific Study			\$202,953.00	\$205,440.00	\$202,343.00	\$211,470.00	\$0.00	\$822,206.00
Identifying Best Practices for Maintaining Stormwater Drywell Capacity	California State Polytechnic University, Pomona	No	\$202,953.00	\$205,440.00	\$202,343.00	\$211,470.00	\$0.00	\$822,206.00
FY25-26								
Scientific Study			\$655,320.00	\$363,442.00	\$0.00	\$0.00	\$0.00	\$1,018,762.00
Data-Driven Resource Optimization and Planning System (DROPS) for Los								
Angeles County	Foothill Municipal Water District	No	\$49,112.00	\$0.00	\$0.00	\$0.00	\$0.00	
Depave LA: Prioritizing Parking Lots for Green Retrofitting	Council for Watershed Health	No	\$125,001.00	\$125,001.00	\$0.00	\$0.00	\$0.00	
Hardscape and Brownfield Transformation Opportunity Study	San Gabriel Valley Council of Governments	No	\$253,400.00	\$0.00	\$0.00	\$0.00	\$0.00	\$253,400.00
Next Gen Bioretention: Towards Living and Adaptive Stormwater								
Systems for a Resilient Los Angeles County	TreePeople	No	\$227,807.00	\$238,441.00	\$0.00	\$0.00	\$0.00	
Grand Total			\$20,197,400.00	\$9,336,902.00	\$402,343.00	\$411,470.00	\$200,000.00	\$30,548,115.00

Watershed Area	Upper San Gabriel River
Included in SIP?	Yes

													Total Anticipated	
Row Labels	Project Lead	DAC						FY 25-26 Budget	FY 26-27 Projection F	Y 27-28 Projection	FY 28-29 Projection F	Y 29-30 Projection	SCW Funding	Total Cost Share
FY20-21			\$10,919,762.00	\$10,789,423.00	\$23,512,652.00	\$17,377,894.00	\$8,806,782.00	\$12,227,754.00	\$2,655,938.00	\$200,000.00	\$200,000.00	\$200,000.00	\$86,890,205.00	\$32,200,000.00
Infrastructure Project			\$9,734,762.00	\$10,589,423.00		\$17,177,894.00		\$12,027,754.00		\$0.00		\$0.00		
Barnes Park	City of Baldwin Park	Yes	\$1,000,000.00	\$1,500,000.00	\$7,400,000.00	\$4,835,690.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14,735,690.00	\$0.00
Bassett High School Stormwater Capture Multi-Benefit Project	Los Angeles County	Yes	\$3,000,000.00	\$7,200,000.00	\$7,000,000.00	\$4,000,000.00	\$0.00	\$10,000,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31,200,000.00	\$31,200,000.00
Encanto Park Stormwater Capture Project	City of Monrovia	Yes	\$702,860.00	\$827,000.00	\$952,388.00	\$0.00		\$2,027,754.00		\$0.00	\$0.00	\$0.00	\$6,965,940.00	
Garvey Avenue Grade Separation Drainage	City of Womovia	163	\$702,000.00	3827,000.00	\$332,366.00	Ç0.00	Ş0.00	32,027,734.00	\$2,433,338.00	Ş0.00	50.00	\$0.00	30,303,340.00	\$1,000,000.00
Improvement Project	City of El Monte	Yes	\$4,000,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,000,000.00	\$0.00
·	East San Gabriel Valley Watershed											•		
	Management Group (City of San													
	Dimas, City of Claremont, City of													
Pedley Spreading Grounds	Pomona, City of La Verne)	No	\$102,760.00	\$154,140.00	\$1,330,180.00	\$1,212,120.00	\$26,700.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,825,900.00	\$0.00
Wingate Park Regional EWMP Project	City of Covina	Yes	\$929,142.00	\$908,283.00	\$6,630,084.00	\$7,130,084.00		\$0.00		\$0.00	\$0.00	\$0.00		\$0.00
Scientific Study	East San Gabriel Valley Watershed		\$385,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$385,000.00	\$0.00
	Management Group (City of San													
San Gabriel Valley Regional Confirmation of	Dimas, City of Claremont, City of													
Infiltration Rates	Pomona, City of La Verne)	No	\$385,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$385,000.00	\$0.00
Technical Resource	, , , , , , , , , , , , , , , , , , , ,		\$800,000.00	\$200,000.00		\$200,000.00		\$200,000.00		\$200,000.00	\$200,000.00	\$200,000.00		\$0.00
Glendora Avenue Green Street Feasibility Study	City of Glendora	No	\$300,000.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$300,000.00	\$0.00
MacLaren Hall Property Park and Sports Fields Project	City of El Monte	Yes	\$300,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$300,000.00	\$0.00
Upper San Gabriel River Watershed Coordinator WC:	Los Angeles County Flood Control		4			4	4	4			4	4	4	
TBD	District	No	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00		\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$2,000,000.00	\$0.00
FY21-22				\$7,490,644.00 \$7,090,644.00	\$1,290,642.00 \$1,290,642.00	\$0.00 \$0.00	\$519,822.00 \$0.00	\$519,822.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$9,820,930.00 \$8,381,286.00	\$5,325,758.00 \$5,325,758.00
Infrastructure Project	East San Gabriel Valley Watershed			\$7,090,644.00	\$1,290,642.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,381,286.00	\$5,325,758.00
Fairplex	Management Group	Yes		\$2,900,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,900,000.00	\$0.00
FINKBINER PARK STORMWATER CAPTURE PROJECT	City of Glendora	No		\$1,290,644.00	7	\$0.00		\$0.00		\$0.00	\$0.00	\$0.00		
	East San Gabriel Valley Watershed			, , ,	. , ,									
Lone Hill Park	Management Group	No		\$900,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$900,000.00	\$0.00
Zamora Park Renovation Project	City of El Monte	Yes		\$2,000,000.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,000,000.00	
Scientific Study				\$100,000.00	\$0.00	\$0.00	\$519,822.00	\$519,822.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,139,644.00	\$0.00
											4			
Regional Pathogen Reduction Study Technical Resource	Gateway Water Management Authority	No		\$100,000.00 \$300.000.00	\$0.00 \$0.00	\$0.00 \$0.00		\$519,822.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$1,139,644.00 \$300.000.00	\$0.00 \$0.00
Sunset Crossing Park Multi-Benefit Stormwater Project	City of Diamond Bar	Yes		\$300,000.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$300,000.00	
FY22-23	City of Diamond Bar	res		\$300,000.00	\$2,290,000.00	\$781,393.00	\$15,000.00	\$479,469.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,565,862.00	\$230,000.00
Infrastructure Project					\$2,150,000.00	\$150,000.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$230,000.00
Glendora Avenue Green Streets	City of Glendora	No			\$150,000.00	\$150,000.00	\$15,000.00	\$0.00		\$0.00	\$0.00	\$0.00	\$315,000.00	\$230,000.00
	East San Gabriel Valley Watershed											•		
Marchant Park	Management Group	Yes			\$675,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$675,000.00	\$0.00
	East San Gabriel Valley Watershed													
Pelota Park	Management Group	Yes			\$1,325,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,325,000.00	\$0.00
Scientific Study					\$140,000.00	\$631,393.00	\$0.00	\$479,469.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,250,862.00	\$0.00
Community Garden Stormwater Capture Investigation	Los Angeles Community Garden Council	No			\$120,000.00	\$258,284.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$378,284.00	\$0.00
Community Garden Stormwater Capture investigation	San Gabriel Valley Council of	140			\$120,000.00	3230,204.00	\$0.00	\$0.00	ŞU.UU	\$0.00	3U.UU	ŞU.UU	3370,264.00	\$0.00
Maximizing Impact of Minimum Control Measures	Governments	No			\$20,000.00	\$373.109.00	\$0.00	\$479,469,00	\$0.00	\$0.00	\$0.00	\$0.00	\$872,578,00	\$0.00
FY23-24					\$20,000.00	\$300,000.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Technical Resource						\$300,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$300,000.00	
West Covina Regional Projects and Green Streets	City of West Covina	Yes				\$300,000.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$300,000.00	\$0.00
FY24-25							\$6,352,054.00	\$6,315,035.00	\$6,317,522.00	\$202,343.00	\$211,470.00	\$0.00	\$19,398,424.00	\$0.00
Infrastructure Project							\$6,152,082.00	\$6,112,082.00	\$6,112,082.00	\$0.00	\$0.00	\$0.00	\$18,376,246.00	\$0.00
Finkbiner Park Stormwater Capture Project, Construction Phase	City of Glendora	No					\$6,152,082.00	\$6,112,082.00	\$6,112,082.00	\$0.00	\$0.00	\$0.00	\$18,376,246.00	\$0.00
Scientific Study	City of Gieridora	140					\$199,972.00	\$202,953.00	\$205,440.00	\$202.343.00	\$211,470.00	\$0.00		
Identifying Best Practices for Maintaining Stormwater	California State Polytechnic University,						, _33,372.00	,_J2,JJJ.00	, _ , , , , , , , , , , , , , , , , , ,	,,_,	,,,,,,,,,,,,	Ç0.00	, -,,, -, -, -, -, -, -, -, -, -	Ç3.00
Drywell Capacity	Pomona	No					\$199,972.00	\$202,953.00	\$205,440.00	\$202,343.00	\$211,470.00	\$0.00	\$1,022,178.00	\$0.00
FY25-26								\$655,320.00	\$363,442.00	\$0.00	\$0.00	\$0.00		\$109,800.00
Scientific Study								\$655,320.00	\$363,442.00	\$0.00	\$0.00	\$0.00	\$1,018,762.00	\$109,800.00
Data-Driven Resource Optimization and Planning														
System (DROPS) for Los Angeles County	Foothill Municipal Water District	No						\$49,112.00	\$0.00	\$0.00	\$0.00	\$0.00	\$49,112.00	\$109,800.00
Depave LA: Prioritizing Parking Lots for Green Retrofitting	Council for Watershed Health							6425.00*.00	£125 001 00	A0.00	60.00	A	£350.000.00	40.00
Hardscape and Brownfield Transformation Opportunity	San Gabriel Valley Council of	No	1					\$125,001.00	\$125,001.00	\$0.00	\$0.00	\$0.00	\$250,002.00	\$0.00
Study	Governments	No						\$253,400.00	\$0.00	\$0.00	\$0.00	\$0.00	\$253,400.00	\$0.00
Next Gen Bioretention: Towards Living and Adaptive		.40						9233,400.00	50.00	Ş0.00	Ş0.00	ŞU.UU	9233,400.00	30.00
Stormwater Systems for a Resilient Los Angeles County	TreePeople	No						\$227,807.00	\$238,441.00	\$0.00	\$0.00	\$0.00	\$466,248.00	\$0.00
Grand Total			\$10,919,762.00	\$18,280,067.00	\$27,093,294.00	\$18,459,287.00	\$15,693,658.00	\$20,197,400.00		\$402,343.00		\$200,000.00		

Attachment C Project Modification Request Forms

ATTACHMENT A: Project Modification Request (PMR) Form

The purpose of this PMR form is to initiate the Project modification process and provide the SCWP with information necessary to evaluate the Project modification request.

	☑Infrastructure Program Project
Regional Program	☐Scientific Studies Program
	☐Technical Resources Program
Project/Study Name	Glendora Avenue Green Streets
Project/Study Lead	City of Glendora
Watershed Area(s)	Upper San Gabriel River
Current Project Phase	Planning
Estimated Completion	
Date of Funded Activity	November 2025
Approved Stormwater	
Investment Plan Fiscal	FY 2025-2026
Year	
Transfer Agreement ID	
(e.g., 2020RPULAR52)	2024MP29

Has the Transfer Agreement or most recent Addendum been executed (i.e., signed by the project lead and the District)? ☐ Yes ☐ No

What type(s) of modification request?	
\square like-for-like modifications	
$\hfill \square$ functionally equivalent BMP modifications	S
$\hfill \square$ modifications to Project or Study compor	ents that were not material to the WASC,
ROC, or Board's decision to include the Pro	ject or Study in the SIP
$\hfill\Box$ reallocation of annual funding projections	in the SIP, provided that the total amount
of Regional Program funding for the Project	or Study remains unchanged
$\hfill\Box$ change in primary or secondary objective	
☐ change in Project benefits	
$\hfill\Box$ change in methodology (e.g., infiltration in	nstead of diversion to sanitary sewer)
☐ decrease in BMP capacity	
☐ change in Project or Study location	
$\hfill\Box$ change in capture area where benefits cla	aimed are diminished or where there is a
change in the municipalities that are receiving	ng benefits
$\hfill \square$ updated engineering analysis resulting in	a reduction of benefits
☐ increase in community support	
$\hfill\Box$ reduction or withdrawal of community sup	pport
$\hfill\Box$ change in amount or status of leveraged	funding
$\hfill\square$ any modification resulting in an increase	of the total amount of Regional Program
funding for the Project or Study	
$\hfill\square$ any modification resulting in a decrease \hfill	of the estimated total amount of Regional
Program funding for the Project or Study	
☑ other, please describe:	
Modification requested to A-10 of the Transfer Agreement:	Work Schedule and Completion Date.
Impact on scope or benefits?	
☐ Improved	□ Neither
☐ Diminished	□ Not Sure

Description of the proposed modification(s), a comparison to the previously approved Project, and the reason(s) why the modification(s) is/are being proposed. Attach additional pages, as needed.

Due to several unexpected changes in Project/Study Lead staffing, the project has experienced delays, prompting this request to extend the schedule by approximately 24 months. Lead is currently taking steps to revive the project and work to ensure consistent progress toward its successful completion. A modification to the initial proposed schedule is presented in the table below:

FIGGAL			ANTICIPAT	TED DATES
FISCAL YEAR	PHASE	ACTIVITY	START DATE	COMPLETION DATE
FY 2022-23	Planning and Design	Program Management	January 2023	June 2023
		PROPOSED MODIFIED DATES:	January 2025	June 2025
FY 2022-23	Planning & Design	Public Outreach	January 2023	June 2023
		PROPOSED MODIFIED DATES:	January 2025	June 2025
FY 2022-23	Design	30% Preliminary Design	February 2023	April 2023
		PROPOSED MODIFIED DATES:	February 2025	April 2025
FY 2022-23	Planning	Environmental Planning and Permitting (CEQA)	April 2023	June 2023
		PROPOSED MODIFIED DATES:	April 2025	June 2025
FY 2023-24	Planning and Design	Program Management	July 2023	June 2024
		PROPOSED MODIFIED DATES:	July 2025	June 2026
FY 2023-24	Planning & Design	Public Outreach	July 2023	June 2024
		PROPOSED MODIFIED DATES:	July 2025	June 2026
FY 2023-24	Planning	Environmental Planning and Permitting (CEQA)	July 2023	September 2023
		PROPOSED MODIFIED DATES:	July 2025	September 2025
FY 2023-24	Design	75%, 90%, Final Design	September 2023	June 2024
		PROPOSED MODIFIED DATES:	September 2025	June 2026
FY 2024-25	Design & Bidding	Program Management	July 2024	October 2024
		PROPOSED MODIFIED DATES:	July 2026	October 2026
FY 2024-25	Bidding	Construction Bidding and Contract	July 2024	October 2024
		PROPOSED MODIFIED DATES:	July 2026	October 2026

If applicable, list previously approved funding allocations/disbursements and revised funding request:

Note, if some or all of a previously Funded Activity cannot be completed as a result of the proposed modification, please include a description and indicate the amount of unused funds. Any unused funds should be reallocated and accounted for in your revised funding request. Attach additional pages, as needed.

SIP Fiscal Year	Approved Funding Allocations	Increase/ Decrease Requested	Revised Funding Request	Description/Phase/Status If applicable, include description of unused funds
N/A				
TOTAL				

A: Approved Total Funding Allocations	\$315,000
B: Revised Estimate of Total Funding from Regional Program	NA
Regional Program Funds Received to date	0
Regional Program Expenditures to date	0
Difference between B and A	0
Percent change between B and A	0

Would the additional funding request be the only option that would	☐ YES
allow the project to be implemented? Please describe.	
N/A	
Would delaying funding allocations impact the project's ability to be	☐ YES
implemented? Please describe.	
N/A	
Would funding only a portion of the additional funding request	☐ YES
impact the project's ability to be implemented? Please describe.	
N/A	
Has the Recipient considered other funding sources? Please	☐ YES
describe. Include type of funding, status, and amount.	
N/A, Additional funding not requested.	

lf	applicable,	a d	escription	on of	difference	e in	SCWP	Anticipate	d Total	Funding
Re	quest. As	a rer	ninder, a	annual	funding	is at	the dis	scretion of t	he WA	SC, ROC
an	d ultimatel	y the	Board o	of Sup	ervisors.	Atta	ich add	itional page	s, as ne	eded.

N/A
Brief description of Supporting Documentation provided. Please include any documentation needed to support benefits claimed by the modified Project or Study and confirm compliance with the Feasibility Study Guidelines.
N/A

Contact information of persons who should be included in correspondence with the SCWP regarding this Project or Study. Attach additional pages, as needed.

Name	Title	Email Address
William Wittkopf	Public Works Director	WWittkopf@cityofglendora.org
Valerie Velasquez-Santoya	Interim Assistant PW Director	VVelasquez@cityofglendora.org

I certify the information and supporting documentation provided is accurate and true.						
I certify the modified Project complies with all requirements described in the Feasibility Study Guidelines.						
I understand this is a request and it is under the WASC's discretion to consider requested modifications.						
Name_Valerie Velasquez-Santoya Organization_City of Glendora						
Signature Valerie Velasguez - Santoya Date 10-31-2024						

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Proposed Modifications to Projects or Studies:

	Status	Date
Scope/benefits of the modified Project or Study is consistent with the Project or Study included in the current fiscal year's SIP and proposed modifications were approved by the SCWP.	☑ YES	1/7/2025
Scope/benefits of the modified Project or Study requires reapproval in the SIP . If yes, select all that apply :	□ YES	
Budget/schedule modifications would impact future SIP funding allocations. If yes, select all that apply:	□ YES	
PMR was received after October 31 of a fiscal year and the PMR will be considered for approval during the preparation of subsequent SIP for the fiscal year <u>after</u> the next	□ YES	-
Project or Study abandoned the proposed modifications	☐ YES	
Projector or Study was withdrawn from consideration by the WASC and shall issue repayment of unspent funds	☐ YES	
Proposed scope/benefit modifications were recommended for approval in the SIP	☐ YES ☐ NO ☐ N/A	
Modifications to the Project or Study's funding allocations were recommended for approval as identified in the SIP	☐ YES ☐ PARTIAL ☐ NO	

Proposed Modifications to Project Concepts:

	Status	Date
Proposed modifications were deemed consistent with the Project concept that was approved by the WASC, ROC and Board for inclusion in the SIP and can be addressed within the existing budget. SCWP staff will proceed to incorporate the proposed modification into the Feasibility Study immediately.	□ YES	
Proposed modifications were deemed significant enough to result in a significantly different Project concept from the one approved by the WASC, ROC and Board for inclusion in the SIP. If yes, select one:	□ YES	
SCWP staff to discontinue work on the Feasibility Study, return unused funds to be programmed in the SIP for the next fiscal year, and advise the proponent to submit the modified Project concept during the Call for Projects for a future fiscal year.	□ YES	-
SCWP staff to abandon the proposed modifications and proceed with the Project concept included in the SIP.	☐ YES	-

ATTACHMENT A: Project Modification Request (PMR) Form

The purpose of this PMR form is to initiate the Project modification process and provide the SCWP with information necessary to evaluate the Project modification request.

	☑Infrastructure Program Project
Regional Program	☐Scientific Studies Program
	☐Technical Resources Program
Project/Study Name	Encanto Park Stormwater Capture Project
Project/Study Lead	Rio Hondo/San Gabriel River Water Mgt Authority
Watershed Area(s)	Upper San Gabriel
Current Project Phase	Design
Estimated Completion Date of Funded Activity	9/30/2026
Approved Stormwater	FY 2020-21
Investment Plan Fiscal	
Year	
Transfer Agreement ID	
(e.g., 2020RPULAR52)	2020RPUSGR03

Has the Transfer Agreement or most recent Addendum been executed (i.e., signed by the project lead and the District)?

✓ Yes □ No

What type(s) of modification request?
☐ like-for-like modifications
☑ functionally equivalent BMP modifications
☐ modifications to Project or Study components that were not material to the WASC, ROC, or Board's decision to include the Project or Study in the SIP
$\hfill\Box$ reallocation of annual funding projections in the SIP, provided that the total amount
of Regional Program funding for the Project or Study remains unchanged
☐ change in primary or secondary objective
□ change in Project benefits
□ change in methodology (e.g., infiltration instead of diversion to sanitary sewer)
☐ decrease in BMP capacity
☐ change in Project or Study location
$\hfill\Box$ change in capture area where benefits claimed are diminished or where there is a
change in the municipalities that are receiving benefits
☐ updated engineering analysis resulting in a reduction of benefits
☐ increase in community support
☐ reduction or withdrawal of community support
\square any modification resulting in an increase of the total amount of Regional Program
funding for the Project or Study
$\hfill\square$ any modification resulting in a decrease of the estimated total amount of Regional
Program funding for the Project or Study
□ other, please describe:
Impact on scope or benefits?
☐ Improved ☑ Neither
□ Diminished □ Not Sure

Description of the proposed modification(s), a comparison to the previously approved Project, and the reason(s) why the modification(s) is/are being proposed. Attach additional pages, as needed.

The Rio Hondo San Gabriel River Water Management Authority (RHSGR WMA) is leading the effort to design and implement the Encanto Park Stormwater Capture Project. Encanto Park is an 11-acre park owned and operated by the City of Duarte, a member of the RHSGR WMA. The objective of this project is to improve the water quality within the San Gabriel River and enhance the existing park surface features. The primary mechanisms to address water quality will be through runoff/pollutant capture, infiltration, filter, and release.

The Encanto Park SW Project was funded under the Safe Clean Water Regional Infrastructure Program in the amount of \$2.48 Million for both the Design and Construction Phases beginning in FY 2020-21. The Project design is 60% complete, however, due to construction costs escalating since 2020, the project requires additional funding in order to construct this project.

If applicable, list previously approved funding allocations/disbursements and revised funding request:

Note, if some or all of a previously Funded Activity cannot be completed as a result of the proposed modification, please include a description and indicate the amount of unused funds. Any unused funds should be reallocated and accounted for in your revised funding request. Attach additional pages, as needed.

SIP Fiscal Year	Approved Funding Allocations	Increase/ Decrease Requested	Revised Funding Request	Description/Phase/Status If applicable, include description of unused funds
2020-21	702,860			Design
2021-22	827,000			Construction allocation
2022-23	952,388			Construction allocation
2023-24		0		
2024-25		0		
2025-26		2,027,754	2,027,754	Final Design and Construction
2026-27		2,455,938	2,455,938	Construction
TOTAL				

A: Approved Total Funding Allocations	2,482,248
B: Revised Estimate of Total Funding from Regional Program	6,965,940
Regional Program Funds Received to date	2,482,248
Regional Program Expenditures to date	
Difference between B and A	4,483,692
Percent change between B and A	181%

Would the additional funding request be the only option that would allow the project to be implemented? Please describe.	☑ YES
The RHSGR WMA has pursued grant funding from the Clean CA Local Grant additional funding but was not selected. The RHSGR WMA has reached out to the Senator Grace Napolitano's Office requesting for Federal support for this project. Federal sources will not provid funding shortfall required for this project. However, if successful, the RHSGR use this funding to reduce the request in subsequent SIP discussions/updates result, the additional funding from the Safe, Clean Water Program is the only option for the RHSGR WMA for this project.	le the WMA will
Would delaying funding allocations impact the project's ability to be implemented? Please describe.	☑ YES
Yes, the project design is at 60% complete. The Draft CEQA IS/MND document is b revised and will be released for public CEQA review in the summer of 2025. The delay in additional funding would delay the ability to construct this project.	eing
Would funding only a portion of the additional funding request impact the project's ability to be implemented? Please describe.	☑ YES
Yes, partial funding would prevent this project from moving forward.	
Has the Recipient considered other funding sources? Please describe. Include type of funding, status, and amount.	☑ YES
The RHSGR WMA has applied for \$2.5 Million in grant funding from the Clear Local Grant for additional funding but was not selected. The RHSGR WMA has reached out to the Senator Grace Napolitano's Office requesting for \$700k in Federal support for this project.	ı CA

If applicable, a description of difference in SCWP Anticipated Total Funding Request. As a reminder, annual funding is at the discretion of the WASC, ROC, and ultimately the Board of Supervisors. Attach additional pages, as needed.

Not applicable			
Drief description of	Supporting	Decumentation provide	d Blassa include any

Brief description of Supporting Documentation provided. Please include any documentation needed to support benefits claimed by the modified Project or Study and confirm compliance with the Feasibility Study Guidelines.

Attachment A. Engineer's Cost Estimate Attachment B. 60% Design Plans	

Contact information of persons who should be included in correspondence with the SCWP regarding this Project or Study. Attach additional pages, as needed.

Name	Title	Email Address
Alex Tachiki	Monrovia Public Works Director	atachiki@ci.monrovia.ca.us
Oliver Galang	Principal, Craftwater	oliver.galang@craftwater.com
Courtney Semlow	Project Manager, Craftwater	courtney.semlow@craftwater.com

I certify the information and supporting documentation provided is accurate and true.	☑ YES
I certify the modified Project complies with all requirements described in the Feasibility Study Guidelines.	☑ YES
I understand this is a request and it is under the WASC's discretion to consider requested modifications.	☑ YES

Name_Alex Tachiki, Director of Public Works

City of Monrovia on behalf of the Organization RH/SGR Watershed Mgt Authority

Date_04/16/2025

Signature

Oliver Galang, Principal Craftwater on behalf of the RHSGR WMA

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Proposed Modifications to Projects or Studies:

	Status	Date
Scope/benefits of the modified Project or Study is consistent with the Project or Study included in the current fiscal year's SIP and proposed modifications were approved by the SCWP.	□ YES	
Scope/benefits of the modified Project or Study requires reapproval in the SIP. If yes, select all that apply:	☑ YES	1/17/2025
Budget/schedule modifications would impact future SIP funding allocations. If yes, select all that apply:	☑ YES	1/17/2025
PMR was received after October 31 of a fiscal year and the PMR will be considered for approval during the preparation of subsequent SIP for the fiscal year <u>after</u> the next	□ YES	-
Project or Study abandoned the proposed modifications	☐ YES	
Projector or Study was withdrawn from consideration by the WASC and shall issue repayment of unspent funds	☐ YES	
Proposed scope/benefit modifications were recommended for approval in the SIP	✓ YES □ NO □ N/A	3/27/2025
Modifications to the Project or Study's funding allocations were recommended for approval as identified in the SIP	☐ YES ☐ PARTIAL ☐ NO	3/27/2025

Proposed Modifications to Project Concepts:

	Status	Date
Proposed modifications were deemed consistent with the Project concept that was approved by the WASC, ROC and Board for inclusion in the SIP and can be addressed within the existing budget. SCWP staff will proceed to incorporate the proposed modification into the Feasibility Study immediately.	□ YES	
Proposed modifications were deemed significant enough to result in a significantly different Project concept from the one approved by the WASC, ROC and Board for inclusion in the SIP. If yes, select one:	□ YES	
SCWP staff to discontinue work on the Feasibility Study, return unused funds to be programmed in the SIP for the next fiscal year, and advise the proponent to submit the modified Project concept during the Call for Projects for a future fiscal year.	□ YES	-
SCWP staff to abandon the proposed modifications and proceed with the Project concept included in the SIP.	☐ YES	-

ATTACHMENT A: Project Modification Request (PMR) Form

The purpose of this PMR form is to initiate the Project modification process and provide the SCWP with information necessary to evaluate the Project modification request.

	☐Infrastructure Program Project
Regional Program	
	☐Technical Resources Program
Project/Study Name	Maximizing Impact of Minimum Control Measures
Project/Study Lead	San Gabriel Valley Council of Governments
Watershed Area(s)	Rio Hondo, Upper San Gabriel River
Current Project Phase	Finalizing Modeling Tools and Results
Estimated Completion	
Date of Funded Activity	6/29/2025
Approved Stormwater	FY22-23
Investment Plan Fiscal	
Year	
Transfer Agreement ID	
(e.g., 2020RPULAR52)	2022RPRH51 and 2022RPUSGR51

Has the Transfer Agreement or most recent Addendum been executed (i.e., signed by the project lead and the District)?

✓ Yes □ No

What type(s) of modification request?
☐ like-for-like modifications
☐ functionally equivalent BMP modifications
☐ modifications to Project or Study components that were not material to the WASC, ROC, or Board's decision to include the Project or Study in the SIP
$\hfill\Box$ reallocation of annual funding projections in the SIP, provided that the total amount
of Regional Program funding for the Project or Study remains unchanged
☐ change in primary or secondary objective
□ change in Project benefits
☐ change in methodology (e.g., infiltration instead of diversion to sanitary sewer)
☐ decrease in BMP capacity
□ change in Project or Study location
$\hfill\Box$ change in capture area where benefits claimed are diminished or where there is a
change in the municipalities that are receiving benefits
☐ updated engineering analysis resulting in a reduction of benefits
☐ increase in community support
☐ reduction or withdrawal of community support
☐ change in amount or status of leveraged funding
☑ any modification resulting in an increase of the total amount of Regional Program
funding for the Project or Study
$\hfill\square$ any modification resulting in a decrease of the estimated total amount of Regional
Program funding for the Project or Study
□ other, please describe:
Impact on scope or benefits?
☑ Improved ☐ Neither
□ Diminished □ Not Sure

Description of the proposed modification(s), a comparison to the previously approved Project, and the reason(s) why the modification(s) is/are being proposed. Attach additional pages, as needed.

A study design for measuring the impact of street sweeping on runoff water quality is proposed, where simulated rainfall events are applied over unswept and swept pavements near each other, runoff is collected from each condition, and water quality results for a range of analytical parameters is compared. The results of this analysis will be used to refine the model inputs representing street sweeping efficiencies under the current study tools developed.
The objective of the proposed modification to the current study is to develop field data documenting runoff water quality from unswept and swept street segments. This data will be used to verify and justify model representation of street sweeping activities and associated pollutant reductions achieved.
Refer to the attached scope for additional details.

If applicable, list previously approved funding allocations/disbursements and revised funding request:

Note, if some or all of a previously Funded Activity cannot be completed as a result of the proposed modification, please include a description and indicate the amount of unused funds. Any unused funds should be reallocated and accounted for in your revised funding request. Attach additional pages, as needed.

SIP Fiscal Year	Approved Funding Allocations	Increase/ Decrease Requested	Revised Funding Request	Description/Phase/Status If applicable, include description of unused funds
FY22-23	\$497,480	\$0	\$497,480	No change
FY23-24	\$939,040	\$0	\$939,040	No change
FY25-26	\$0	\$799,115	\$799,115	Add empirical measurements of street sweeping
TOTAL	\$1,436,520	\$799,115	\$2,235,635	

A: Approved Total Funding Allocations	\$1,436,520
B: Revised Estimate of Total Funding from Regional Program	\$2,235,635
Regional Program Funds Received to date	\$1,436,520
Regional Program Expenditures to date	\$690,182
Difference between B and A	\$799,115
Percent change between B and A	156%

Would the additional funding request be the only option that would	☑ YES	
	M IES	
allow the project to be implemented? Please describe.		
The SCWP is the option available to fund the empirical measurements of loca street sweeping. The methods were previously developed under the Southern California Stormwater Monitoring Coalition (SMC).		
Would delaying funding allocations impact the project's ability to be	☐ YES	
implemented? Please describe.		
No, the study can proceed as planned; however this additional allocation would provi more robust justification and direct measurements of local street sweeping effectiven	de ess.	
Would funding only a portion of the additional funding request	☑ YES	
	₩ 1E3	
impact the project's ability to be implemented? Please describe.		
Funding can be scaled based on the number of test sites, which the current funding request is based on 5 sites. More sites allow for assessment of variable conditions and greater confidence in variability of results.		
Has the Recipient considered other funding sources? Please	☑ YES	
describe. Include type of funding, status, and amount.	⊻ IE3	
The methods to be utilized under this proposed work were originally funded by the Si funding did not support further implementation of the methods, which is what is being herein.	MC. That g pursued	

If applicable, a description of difference in SCWP Anticipated Total Funding Request. As a reminder, annual funding is at the discretion of the WASC, ROC, and ultimately the Board of Supervisors. Attach additional pages, as needed.

An additional \$799,115 is being requested, \$479,469 from the USGR WASC and \$319,646 from the RH WASC. This is requested for FY25-26 to support the additional of empirical measurements of street sweeping.
Refer to the attached scope for details on the additional funding request cost breakdown.

Brief description of Supporting Documentation provided. Please include any documentation needed to support benefits claimed by the modified Project or Study and confirm compliance with the Feasibility Study Guidelines.

Attached scope includes background, objectives, methods, deliverables, schedule, and budget to be implemented with the additional funding request.

Contact information of persons who should be included in correspondence with the SCWP regarding this Project or Study. Attach additional pages, as needed.

Name	Title	Email Address
Turner Lott	Senior Management Analyst	tlott@sgvcog.org
Brianna Datti	Director of Science & Policy	brianna.datti@craftwater.com

I certify the information and supporting documentation provided is	☑ YES
accurate and true.	
I certify the modified Project complies with all requirements described	☑ YES
in the Feasibility Study Guidelines.	
I understand this is a request and it is under the WASC's discretion to	☑ YES
consider requested modifications.	

Name Mansa Creter

Organization SQVCOG

Signature Mari Cul

Date 10/31/24

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Proposed Modifications to Projects or Studies:

	Status	Date
Scope/benefits of the modified Project or Study is consistent with the Project or Study included in the current fiscal year's SIP and proposed modifications were approved by the SCWP.	□ YES	
Scope/benefits of the modified Project or Study requires reapproval in the SIP. If yes, select all that apply:	☑ YES	1/17/2025
Budget/schedule modifications would impact future SIP funding allocations. If yes, select all that apply:	☑ YES	1/17/2025
PMR was received after October 31 of a fiscal year and the PMR will be considered for approval during the preparation of subsequent SIP for the fiscal year <u>after</u> the next	□ YES	-
Project or Study abandoned the proposed modifications	☐ YES	
Projector or Study was withdrawn from consideration by the WASC and shall issue repayment of unspent funds	□ YES	
Proposed scope/benefit modifications were recommended for approval in the SIP	✓ YES □ NO □ N/A	3/27/2025
Modifications to the Project or Study's funding allocations were recommended for approval as identified in the SIP	✓ YES □ PARTIAL □ NO	3/27/2025

Proposed Modifications to Project Concepts:

	Status	Date
Proposed modifications were deemed consistent with the Project concept that was approved by the WASC, ROC and Board for inclusion in the SIP and can be addressed within the existing budget. SCWP staff will proceed to incorporate the proposed modification into the Feasibility Study immediately.	□ YES	
Proposed modifications were deemed significant enough to result in a significantly different Project concept from the one approved by the WASC, ROC and Board for inclusion in the SIP. If yes, select one:	□ YES	
SCWP staff to discontinue work on the Feasibility Study, return unused funds to be programmed in the SIP for the next fiscal year, and advise the proponent to submit the modified Project concept during the Call for Projects for a future fiscal year.	□ YES	-
SCWP staff to abandon the proposed modifications and proceed with the Project concept included in the SIP.	☐ YES	-

ATTACHMENT

Empirical Measurement of Street Sweeping Impacts on Runoff Water Quality

Maximizing Impact of Minimum Control Measures Project Modification Request

Background

The Maximizing Impact of Minimum Control Measures scientific study is developing research to quantify the positive impact of "minimum control measures" including street sweeping on pollutant loading and concentrations. Empirical evidence quantifying runoff water quality with and without street sweeping is of interest to support tools being developed by the current study to improve Watershed Management Programs and help achieve water quality objectives.

The body of knowledge in literature concurs that street sweepers remove substantial amounts of debris, and that advanced sweeper technologies (e.g. those that use vacuum, pressure washing, or both) are measurably superior to mechanical broom sweepers. However, there is no generally accepted method to translate loads captured by street sweepers during dry weather into reductions in urban runoff event mean concentrations (EMCs). No study identified to date has shown an effect of street sweeping on downstream water quality, e.g., at outfalls, nor has any study definitively quantified differences in stormwater runoff concentrations between swept and unswept streets (Kang et al. 2009; Kang and Stenstrom 2008; Muhammad et al. 2006; Pearson et al. 2018). High event-to-event variability in pollutant build-up and wash-off has been identified as a challenge in measuring downstream benefits (or lack thereof). Study designs may have also prevented conclusive findings at outfalls, since the roadway is usually only a fraction of the total contributing catchment.

The Southern California Coastal Water Research Project (SCCWRP) has developed a field-testing method that uses a portable rainfall generator (RFG) to create and isolate runoff from street surface segments. Use of simulated storms with the RFG enables generating repeatable experimental conditions in-situ to promote development of a statistically robust dataset. The use of simulated storm events eliminates the environmental variability that confounds interpretation of previous studies found in the literature. Specifically, effects of rainfall intensity, duration, frequency in relation to the occurrence of street sweeping, and interference from runoff from the wider catchment are eliminated by using simulated events.

A study design for measuring the impact of street sweeping on runoff water quality is proposed, where simulated rainfall events are applied over unswept and swept pavements near each other, runoff is collected from each condition, and water quality results for a range of analytical parameters is compared. The results of this analysis will be used to refine the model inputs representing street sweeping efficiencies under the current study tools developed.

Objectives

The objective of the proposed modification to the current study is to develop field data documenting runoff water quality from unswept and swept street segments. This data will be used to verify and justify model representation of street sweeping activities and associated pollutant reductions achieved.

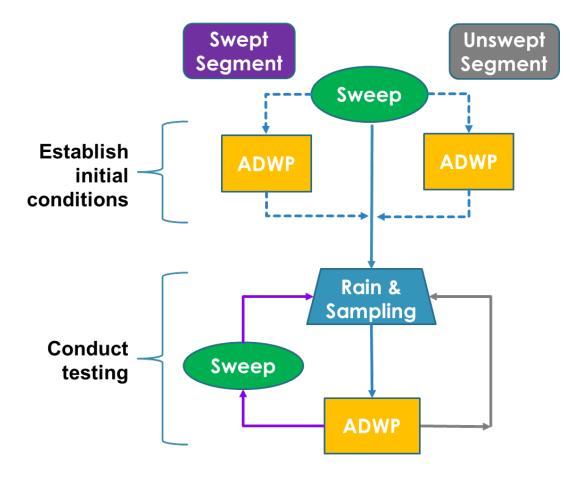
Methods

The overall approach (Figure 1) begins with establishing similar initial pavement conditions by sweeping all pavement segments to be tested according to a set antecedent dry period (ADWP). After the end of the ADWP, simulated rainfall is applied to unswept and swept pavements, and samples are collected. Subsequently, only the designated swept pavement segment is swept again after the next ADWP has elapsed. Rainfall is again applied to both swept and unswept pavements, with sample collection. The cycle is repeated as needed.

Each day of testing will include:

- Traffic control established by the municipal partner
- On-site assembly of the RFG by SCCWRP
- Water delivery provided by the municipal partner, if not available on- or near the tesing site
- Sweeping of the designated side or segment of the street by the municipal partner
- Applying simulated rainfall to unswept and swept pavement segments, and collecting and aliquoting runoff samples by SCCWRP
- Collection of a range of field blanks by SCCWRP
- Disassembly of the RFG by SCCWRP
- Transportation of samples to SCCWRP for subsequent distribution for analytical services on the following day.

The RFG will be applied consecutively over three adjacent pavement segments to create a unique test per pavement condition. Simulated rainfall will be applied for 15-min over each segment. The duration of rainfall has been determined as a balance between providing adequate time for pollutant wash-off, an ability to test multiple segments to constitute a single event for a pavement condition, and testing multiple events in a single day. Runoff will be captured along the gutter using a peristaltic pump, and collected in a clean 200-L polypropylene barrel to create a whole-of-event composite sample per test event per pavement condition. The composite sample will be aliquoted for subsequent laboratory analysis.



ADWP = antecedent dry weather period

Figure 1. Overall approach to compare runoff water quality from swept and unswept pavements.

Site selection will consider:

- Street segments with a clear slope towards a hard curb (Figure 2).
- At least one driving lane adjacent to the curb.
- Proximity to an accessible water supply is desirable, but not required if the municipal partner is able to provide a water truck or other supply.
- Segments designated as unswept and swept for the purposes of testing must be in close proximity to each other, ideally they are opposite sides of the same street (assuming a center crown), or segments along the same side of the street (Figure 3). This criterion is intended to limit the influence of pavement condition on comparisons between swept and unswept runoff water quality for a given location.
- A candidate list of test locations will be identified in coordination with municipal representatives. SCCWRP will conduct site recon with a municipal representative.



Figure 2. Characteristics of hypothetical test site.

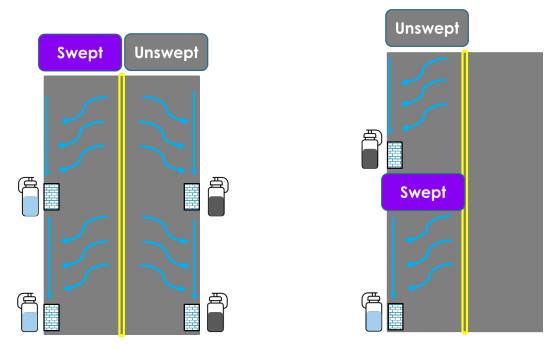


Figure 3. Test location should identify street segments in close proximity to test unswept and swept pavement conditions. Test segments may either be on opposite sides of a street with a center crown (LEFT) or along the same side of a street where a clear designation between unswept and swept areas can be established (RIGHT).

At least four pairs of unswept and swept pavements will be tested at each location. Up to two test pairs (4 individual rainfall events) can be conducted in a single test day if there are multiple segments available for each pavement condition, for the example as depicted in the site configuration on the left of Figure 3. Alternative approaches to testing may be developed to conduct multiple tests in a single day of a single pavement condition at a time (i.e. conduct 4 tests on swept street segments in a single day, and return another day to conduct 4 tests on unswept street segments).

ADWP is hypothesized to influence pollutant accumulation, and thus runoff water quality. At a minimum, testing will be conducted according to the street sweeping frequency currently followed by each municipality, i.e., establish water quality according to current conditions.

Number of Tests

A test pair herein refers to a direct comparison between unswept and swept pavement water quality at a given location. The minimum number of test pairs needed to establish statistically defensible differences in runoff water quality between unswept and swept pavements at a given location is estimated as 4-6 test pairs. This estimate is based on analysis of limited data collected during pilot testing of the method by SCCWRP. Consistently performing locations require fewer samples, whereas sites with significant heterogeneity require more samples for statistical confidence. These conditions cannot be identified in advance. In any/all cases, variability in measured water quality in each location will be quantified.

It is hypothesized that pavement condition/level of service and usage, such as average daily traffic, might influence runoff water quality. The most robust overall data set will be established by locations that all reflect similar pavement conditions. However, this type of criteria may limit feasible sites for testing that support the logistics of the test method, thus limiting pavement condition to a narrow range is not recommended as strict criteria for site selection.

The proposed modification includes testing at up to 5 different site locations.

Analyte List

A range of water quality parameters are proposed for analysis (Table 1), representing conventional contaminants (e.g., sediments and nutrients), typical contaminants of concern from streets (e.g., heavy metals and PAHs), and emerging contaminants of concern (e.g., microplastics).

Table 1. Proposed analyte list

Total suspended solids (TSS)			
Total phosphorus (TP)			
Total nitrogen (TN)			
Total hardness			
Total and dissolved heavy metals	Aluminum (Al)	Lead (Pb)	
	Arsenic (As)	Mercury (Hg)	
	Cadmium (Cd)	Nickel (Ni)	
	Chromium (Cr)	Selenium (Se)	
	Copper (Cu)	Silver (Ag)	
	Iron (Fe)	Zinc (Zn)	
Polycyclic aromatic hydrocarbons (PAHs)	1-Methylnaphthalene	Benzo[g,h,i]perylene	
	1-Methylphenanthrene	Benzo[k]fluoranthene	
	2,3,5-Trimethylnaphthalene	Biphenyl	
	2,6-Dimethylnaphthalene	Chrysene	
	2-Methylnaphthalene	Dibenz[a,h]anthracene	
	Acenaphthene	Dibenzothiophene	
	Acenaphthylene	Fluoranthene	
	Anthracene	Fluorene	
	Benz[a]anthracene	Indeno[1,2,3-cd]pyrene	
	Benzo[a]pyrene	Naphthalene	
	Benzo[b]fluoranthene	Perylene	
	Benzo[e]pyrene	Phenanthrene	
		Pyrene	
Fecal indicator bacteria (FIB)	Enterococci		
	E. Coli		
	Total coliforms		
Microplastics			

Deliverables

An Empirical Measurements of Street Sweeping technical memorandum will be prepared documenting test locations, site conditions, and the water quality results. Water quality results for all individual tests will be provided, as well as summary statistics such as mean concentrations from each pavement surface with measures of variability such as confidence intervals on the mean and standard deviations. Likewise, %-differences between unswept and swept pavement runoff concentrations will be determined, with a measure of variability. All laboratory analytical results will be provided.

Results of the empirical measurements will be used to update the models representing long-term impacts of street sweeping. The Program Performance Evaluation memorandum under the current study will be updated with these refined results, along with the Technical Platform displaying model results for street sweeping programs.

Schedule

Task	Task Name	Milestone
	Assumed NTP	10/1/2025
1	Stakeholder Progress Meetings	Ongoing
1	Quarterly Report	11/15/2025
1	Annual Report	12/31/2025
1	Quarterly Report	2/15/2026
1	Quarterly Report	5/15/2026
1	Quarterly Report	8/15/2026
1	Quarterly Report	11/15/2026
1	Annual Report	12/31/2026
2	Field Sampling	7/31/2026
2	Lab Analysis (all conventional pollutants, excluding Microplastics)	8/31/2026
2	Lab Analysis (Microplastics)	11/30/2026
2	Technical Report (all conventional pollutants, excluding Microplastics)	9/30/2026
2	Technical Report (w/ Microplastics)	12/31/2026
3	Updated Program Performance Evaluation Memo	11/30/2026
3	Updated Technical Platform	1/29/2027

Budget

Task	Task Name	Total Budget	USGR WASC Budget	RH WASC Budget
1	Project Management and Stakeholder Engagement	\$ 154,047	\$ 92,428	\$ 61,619
2	Empirical Measurements of Street Sweeping Impacts	\$ 585,068	\$ 351,041	\$ 234,027
3	Updated Program Performance Evaluation and Technical Platform	\$ 60,000	\$ 36,000	\$ 24,000
TOTAL		\$799,115	\$479,469	\$319,646