Central Santa Monica Bay
Watershed Area Steering Committee (WASC)
Meeting Minutes

Tuesday, April 2, 2024
1:00pm – 4:00pm

In-person
Culver City Hall, Patacchia Room
9770 Culver Blvd, Culver City, CA 90232

Online
WebEx

Committee Members Present:
*Mark Beltran, LA County Flood Control District (Agency)
Susie Santilena, LA City Sanitation and Environment (Agency), Co-Chair
*Darryl Ford, LA City Recreation & Parks (Agency)
Rita Kampalath, LA County Chief Sustainability Office (Community), Co-Chair
Ion Cretu, PSOMAS (Community)
*Gloria Medina, The Solutions Project/SCOPE (Community)
Bruce Reznik, LA Waterkeeper (Community)
Edgar Campos, (Community)
*Matthew Magener, Beverly Hills/West Hollywood (Municipal)
Sean Singletary, Culver City (Municipal)
Roberto Perez, Los Angeles (Municipal)
*Blayne Sutton-Wills, Los Angeles (Municipal)
Michelle Barton, Los Angeles (Municipal)
Bruce Hamamoto, Los Angeles County (Municipal)
Vanessa Boudreau, SGA Marketing (Watershed Coordinator, non-voting member)
Meredith McCarthy, Heal the Bay (Watershed Coordinator, non-voting member)

*Committee Member Alternate

Absent Committee Members
E.J. Caldwell, West Basin Metropolitan Water District (Agency)
Delon Kwan, LA Department of Water and Power (Agency)
Joshua Carvalho, Santa Monica (Municipal)

See attached sign-in sheet for full list of attendees.

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1) Welcome and Introductions

Rita Kampalath, Co-Chair of the Central Santa Monica Bay (CSMB) Watershed Area Steering Committee (WASC), welcomed Committee Members, shared housekeeping items, and called the meeting to order.

District staff facilitated the roll call of Committee Members. District staff and all Committee Members made self-introductions and a quorum was established.

2) Approval of Meeting Minutes from February 6, 2024

Member Bruce Reznik motioned to approve meeting minutes from February 6, 2024, seconded by Member Blayne Sutton-Wills. The Committee voted to approve the February 6, 2024 minutes, with 12 votes in favor, 1 vote in abstention, 0 votes in opposition, and 1 absent at the time of the vote (approved, see vote tracking sheet attached).

3) Committee Member and District Updates

District staff provided an update, noting:

- The new SCW Program website has launched. The updated website represents a significant step forward in the SCW Program's commitment to transparency, accessibility, and collaboration. The site includes new features and enhancements, such as the Resource Library, search function, and events calendar.
- The Regional Coordination team prepared the first FY23-24 Q3 Quarterly Funding Report & Matrix, now available on the SCW Program website. The funding report includes a high-level overview of recent funding policy highlights and a funding matrix that shares currently active and upcoming funding opportunities that may be relevant to SCW Program infrastructure projects.
- Future Committee meeting agendas will include one public comment period by default, and a second public comment period if voting items are on the agenda. Public comment cards will no longer be displayed onscreen but will still be compiled and posted on the SCW Program website and emailed to Committee Members prior to the meetings.
- On March 19, the Los Angeles County Board of Supervisors (Board) approved the appointment and reappointment of Committee Members to the Regional Oversight Committee (ROC), Scoring Committee, and some WASC community stakeholder Members. For the CSMB WASC, Co-Chair Rita Kampalath was reappointed to a community stakeholder seat.
- The Fiscal Year 2023-2024 (FY23-24) second Quarterly Report was due on February 15. Progress reports must still be completed even if there was no activity done on the project or if the Transfer Agreement has not been executed. The next Quarterly Report is due on May 15.
- The Round 4 Transfer Agreement and Addendums are available for download in the Transfer Agreement Module. Emails sent out on January 24 include checklist instructions on how to navigate the new module.
- The ROC submitted the Biennial SCW Program Progress Report (Biennial Report) to the Board, available on the SCW Program website. The ROC will begin watershed goal-setting sessions at future meetings. More information can be found on the SCW Program website under the ROC webpage.
- In March, the Director of LA County Public Works submitted a SCW Program Status Report to the Board. The Status Report expands upon the insights provided in the "Accelerating Implementation of the SCW Program" Board Motion and is informed by the Biennial Report, an audit commissioned by the Director, and the Board's recommendations. Additionally, the Board approved a motion by Supervisor Lindsay Horvath for "Progress and Adaptive Management of the SCW Program" which requests a report-back in 90 days. These items can be found on the SCW Program website under the Resources tab.
- FY24-25 Municipal Annual Plans were due on April 1. Municipal Audits were due at the end of March for most cities.
- WASC Members whose job connects them to specific projects should ask colleagues or consultants to attend WASC meetings to share about or advocate for those projects during Stormwater Investment Plan (SIP) deliberations to ensure a fair and transparent process.

Member Reznik shared that the March 19 Board meeting showcased agreement among the Board, the ROC, and non-governmental organizations (NGOs) to make the SCW Program more proactive, community-driven, and strategic.

4) Watershed Coordinator Updates

Meredith McCarthy was introduced as the interim Watershed Coordinator representing Heal the Bay. Watershed Coordinator Vanessa Boudreau shared an update on recent engagement events, such as the School Greening Tour in March. Upcoming events include "Stormwater 101," a community vision workshop,

hosted by Strategic Concepts in Organizing and Policy Education's (SCOPE) Water Academy on April 6. The Ballona Creek Regional Coordination Meeting will be held on April 26 where the US Army Corps of Engineers will discuss Section 408 and 404 permitting. Watershed Coordinator Boudreau also shared ongoing conversations with the Housing Authority of the City of Los Angeles regarding the Mar Vista Gardens community and with elementary schools for school greening.

5) Public Comment Period

District staff compiled all public comments and uploaded them to the SCW Program website. In-person, virtual and call-in users were invited to provide public comment. Co-Chair Santilena requested that District staff share the comment cards submitted onscreen. The two public comment cards received expressed support for the MacArthur Lake Rehabilitation Project.

Ali Sharbat (California Polytechnic University, Pomona (Cal Poly Pomona)) spoke about the importance of the proposed Identifying Best Practices for Maintaining Stormwater Drywell Capacity Scientific Study (hereafter referred to as the Drywell SS) and highlighted that workforce development is a key aspect of the study. Cal Poly Pomona is a Hispanic Serving Institution, and a significant proportion of its population is first-generation.

Jocelyne Flores (Mujeres de la Tierra) commented that MacArthur Park is an ever-changing place with a growing community that continues to prioritize having a clean and accessible park for future generations. Flores maintained that the city must continue to invest in projects that will not only create cleaner water for communities but also conserve stormwater resources. Flores asserted that the MacArthur Lake Rehabilitation Project intends to provide those project benefits and will continue to be an example of how equitable water infrastructure can shape better futures for neighborhoods.

Margarita Aguilar (Mujeres de la Tierra) shared that Mujeres de la Tierra has created many partnerships with other key organizations in the area who are all passionate about making the park a healthier and cleaner environment for all stakeholders. Although MacArthur Park has faced many challenges, the park remains a hub in the middle of the city. Collaborations have included working with the Korean Youth Community Center, LA Commons, Los Angeles County Museum of Art, Heart of Los Angeles, Central City Neighborhood Partners, and the Maya Foundation and Art Division. These are all organizations that are invested in making the park a place for everyone to enjoy. Aguilar explained that the addition of the water feature would complement the playground, which was recently filled with children and families enjoying the start of Spring. Many organizations collaborate with Mujeres de la Tierra to present virtually, at schools, and at Neighborhood Councils where over 300 members of the community have shared the benefits of the project.

6) Discussion

a) Ex Parte Communication Disclosure

Member Bruce Hamamoto briefly reviewed some of the submitted projects' descriptions and metrics with Member Mark Beltran.

b) Round 5 Project Modification Requests (PMR) Recap Presentation
By: Watershed Coordinators

Watershed Coordinator Boudreau shared a summary of the Baldwin Vista Green Streets Project.

Watershed Coordinator Boudreau also shared an update and noted that the City of West Hollywood withdrew the Technical Resources Program (TRP) application for The Sky Sanctuaries: San Vicente Project, as the City of West Hollywood acquired internal funding for a Feasibility Study; the City will likely return to the SCW Program for IP funding.

The Watershed Coordinators also gave brief summaries on each of the submitted Scientific Studies (SS) and the two Project Modification Requests (PMRs).

c) FY 24-25 Peer-reviewed Scientific Study Summaries

i. **SS Summary: Identifying Best Practices for Maintaining Stormwater Drywell Capacity**
California State Polytechnic University, Pomona (Cal Poly Pomona)

ii. **SS Summary: Street Sweeping Study**
City of Los Angeles Sanitation and Environment (LASAN)

iii. **SS Summary: Pollutant Source Characterization Study**
City of Los Angeles Sanitation and Environment (LASAN)

District staff noted that the independent review was conducted by CASC Engineering for each of the SS and shared the peer review summaries onscreen.

Co-Chair Santilena noted that none of the independent reviews found any major concerns with any of the SS. Co-Chair Santilena noted that the independent review of the Drywell SS was conflicting on whether the study effectively addressed its goals.

Member Reznik agreed that independent reviewers were varied but generally lukewarm. Member Reznik shared the opinion that including the studies in the SIP will depend more on the available funding given the two PMRs than the results of the independent reviews.

d) CSMB Watershed Area Project Prioritization and Selection for FY 24-25 Stormwater Investment Plan (SIP) (Project's Survey, SIP Tool, Summary of Resources)

i. **Infrastructure Program (IP)**
   (1) **Baldwin Vista Green Streets Project**
   LASAN

ii. **Scientific Study Program (SS)**
   (1) **Identifying Best Practices for Maintaining Stormwater Drywell Capacity**
   Cal Poly Pomona
   (2) **Street Sweeping Study**
   LASAN
   (3) **Pollutant Source Characterization Study**
   LASAN

iii. **Technical Resources Program**
   (1) **The Sky Sanctuaries: San Vincente Streetscape Plaza – Application Withdrawn**
   City of West Hollywood

iv. **Project Modification Requests (PMRs)**
   (1) **MacArthur Lake Rehabilitation Project**
   LASAN
   (2) **Ballona Creek TMDL Project**
   LASAN

District staff shared the survey results of Committee Members project preferences. A total of 11 Committee Members completed the survey; each response corresponds to one vote per seat and counts the primary seat's response over the alternate's response. District staff also shared the SIP tool onscreen to show the following funding scenarios and how the overall Watershed Area budget would be affected:

- Inclusion of the new Round 5 projects and previously funded and continuing projects
- Inclusion of the immediately above and additionally funding for the two PMRs
- Inclusion of the immediately above and the anticipated future construction costs

District staff explained that the anticipated construction costs shown are potential costs for projects that received SCW Program funding for design. The costs shown are total construction cost and does not account for any leveraged or matching funds. Fossum clarified that the cost does not represent an actual request made by any proponent, just a projected estimate. Co-Chair Santilena noted that it is good practice to consider upcoming project requests but noted that the WASC has no way of knowing when the proponents will return for future funding or how much the proponent will request.

Co-Chair Santilena noted that the WASC is in good position to fund all requests, but that it is important for the WASC to discuss and decide what should be funded. Member Gloria Medina agreed that the Committee should consider which projects to fund rather than fund everything within the WASC's capacity, especially considering the SCW Program's commitment to community engagement. Member Medina highlighted the MacArthur Lake Rehabilitation Project as a good example of community engagement.

Upon inquiry, the project applicant from Baldwin Vista Green Streets Project explained that the project presentation outlines the most recent community engagement efforts. Should the project be funded, more community engagement will be conducted. The project applicant also noted that LASAN prioritizes the PMRs over new Round 5 projects.

Member Edgar Campos asked the project applicant of the Street Sweeping Study whether similar research is typically conducted within government agencies and why the project is specifically seeking SCW Program funds. Member Reznik stated a preference for SS proposed by academic entities over government agencies and suggested that the WASC should prioritize studies that center nature-based solutions and strategic planning.

In response to Member Campos and Member Reznik, the project applicant for the Street Sweeping Study explained that the study is requesting funding from the SCW Program because of the study's focus on water quality parameters and how street pollutants are often carried by stormwater. Improving street sweeping would therefore improve receiving water quality. Member Campos confirmed with the project applicant that the parameters related to seasonal changes would not be correlated to tree density and debris, but to specific water quality pollutants. Member Campos expressed concern that the study would focus on cleaning streets in areas that were already benefiting from greening, leaving disadvantaged areas further neglected. The project applicant noted that the study would be targeting areas where high pollutant levels of heavy metals from brake pads and fecal indicator bacteria are found, not specific communities. Member Campos noted that communities in South Los Angeles that have many industrial facilities might benefit from this study.

Member Medina asked the project applicant to explain LASAN's capacity to implement improvements that may be identified during the study. The project applicant explained that LASAN is currently working to electrify the entire fleet so the timing of this SS may be an opportunity where changes can be implemented concurrently.

Upon inquiry, the project applicant also noted that the study could still move forward if two of the three WASCs decide to fund the SS. However, since the Upper Los Angeles River (ULAR) WASC represents a large portion of the funding, the study would have difficulty moving forward without the ULAR WASC funding. Member Sutton-Wills clarified with the project applicant that if only two of the three WASCs fund the study, that the study would either find internal funding to meet the full scope or if the ULAR WASC for example decided to only provide partial funding, the number of samples may be reduced proportionally. Member Campos noted the significance of region loss and sample size reduction in that scenario.

Watershed Coordinator McCarthy asked if the SS was investigating street sweeping on permeable pavement. The project applicant noted that the first phase of the study, which was already conducted by LASAN in a controlled environment, investigated sweeper efficiency over smooth versus rougher surfaces, which may address permeable pavement aspects. Watershed Coordinator McCarthy also confirmed with the Committee that the MacArthur Lake Rehabilitation Project, for example, is concerned with zinc but that the pollutant may not necessarily be coming from street pollutants alone, since the lake receives water from a large drainage area that is comprised of various land uses. The project applicant noted that this concern would be more closely aligned with the Pollutant Source Characterization SS.

Co-Chair Rita Kampalath asked the project applicant if the SS results would be applicable to other cities. The project applicant explained that the first phase of the SS comparing different types of sweepers and efficiencies would be useful for any entity evaluating street sweepers. While the SS will be collecting data from specific roads and areas through the City of Los Angeles, the traffic patterns and underlying conditions of those areas may result in higher pollutant loads, and that logic can be applied anywhere. The project applicant would share the study's findings.

Member Campos also inquired with the project applicant as to why there is no procurement officer within the City of Los Angeles to investigate the benefits and tradeoffs of a particular equipment such as street sweepers. The project applicant explained that the study is focusing specifically on water quality impacts, which may not be evaluated by a typical procurement officer.

Member Darryl Ford noted that the SCW Program has yet to truly see the impacts of SS that have been funded, and that the dollar amounts are relatively small, so it is difficult to decide whether to include SS generally. District staff also noted that the WASC can request that previous SS proponents provide an update at the WASC meetings, noting potential presentations from the Community Gardens and Microplastic SS.

Member Reznik confirmed with District staff that no more than 5% of the WASC's budget can be dedicated to SS, meaning that no more than 5% of the entire Regional Program is dedicated to SS and that theoretically 100% of the budget can be dedicated to IP. Member Reznik explained that in total, the amount of funding requested for SS would be significant to research institutions. Currently, SS are distributed across watersheds, potentially leading to a lack of collaboration. Member Ford agreed that the current process forces research entities to repeatedly apply for small SS funds across multiple watersheds. Member Reznik suggested that perhaps a collective pool for SS could be something District staff considers.

Member Sutton-Wills asked the project applicant for the Drywell SS whether the scope would be reduced due to a reduction in funding from other WASCs. The project applicants explained that the study's budget was based on the number of sites in each watershed area, so the budgets are independent across watersheds. If any number of WASCs decide to fund the project, the evaluation of sites in those watershed areas would progress.

Member Medina asked the project applicant to elaborate on the SS's impacts on workforce development. The project applicant noted that the project team will be comprised of undergraduate students along with faculty members and graduate students. These students will receive hands-on experience collecting, analyzing, and reporting data. Cal Poly Pomona is also developing a certificate program for stormwater management. Member Roberto Perez confirmed with the project applicant that students will receive a stipend as part of the project budget.

Watershed Coordinator McCarthy pointed out that this WASC is voting on an IP with 47 drywells and an SS that is investigating the performance of those drywells; the SS's results on maintenance practices would be useful for that project, and any other projects that include drywells.

Member Ford proposed funding everything brought before the WASC. While LASAN prioritizes the PMRs over the new IP, Member Ford expressed support for the Baldwin Vista Green Streets Project.

District staff noted that in the scenario where PMRs are funded, all funding requirements for the WASC are met. If the PMRs are not funded, the WASC would not be in compliance with the requirement that less than 5% of the total funds are allocated to SS. District staff also noted that an 80% budget allocation is the general recommended threshold for reserving funding for future projects, and reminded the WASC that projects that are not funded this year can always return for funding in future rounds.

Co-Chair Santilena asked District staff if there were any updates on the potential Round 6 Call for Projects pause and expressed support for the budget scenario funding all projects if there were to be a pause. District staff noted that a pause is highly likely, though not yet confirmed.

Member Reznik proposed fully funding the two PMRs and the Drywell SS for the following reasons: LASAN prioritizes the two PMRs, LASAN has underestimated project costs, and nearly all the projects proposed in this WASC are from LASAN. Member Reznik expressed support for the academic perspective of the Drywell SS and its commitment to workforce development. Regarding the potential pause on the SCW Program, Member Reznik noted that the SCW Program has not been proactive in strategic planning and highlighted the possibility of more upcoming PMRs that may request additional funding. Member Reznik expressed an opinion that the two LASAN SS and IP project are not strong enough projects to approve.

Member Beltran confirmed with District staff that the potential pause on the Round 6 Call for Projects would defer new project applications, including new construction funding applications for projects that received design funding, however, PMRs can still be submitted. District staff confirmed that projects whose PMRs are denied are still responsible for completing the project under the terms of the Transfer Agreement. Project developers facing a budget shortfall can reference the leveraged funding resources created by the Regional Coordination team and Watershed Coordinators.

Upon inquiry, the LASAN representatives for the SS noted that LASAN prioritizes the Street Sweeping SS over the Pollutant Source Characterization SS. Member Hamamoto confirmed with the project applicant that the SS has not been presented at the ULAR WASC yet.

Member Campos noted that funding the SS is minimal compared to the other projects or PMRs and the impacts of the study could be useful.

Member Prieto confirmed with District staff that according to the SIP tool, if all projects were funded this year, the WASC would still have around half the budget available for future years. Member Reznik noted that those budget projections do not account for future PMRs that may ask for a large amount of funds.

Several Committee Members agreed that the SIP package would be well-balanced if both PMRs are approved, as one is an example of community engagement and the other a benefit to water quality compliance. The Committee Members also generally agreed that the SS are small funding amounts and would produce useful results.

The Committee highlighted that the Baldwin Vista Green Streets Project would create some green space for the community that otherwise does not receive much investment. Member Medina expressed desire to invest in this community, however, did not want to encourage a project with minimal community engagement and outreach. The project applicant responded that there were tabling efforts in the community and various outreach events but understood the need to conduct more intentional engagement during the pre-design phase to include community priorities.

The project applicant also confirmed that the cost estimates for the Baldwin Vista Green Streets Project were developed using updated escalation rates to avoid future funding requests. Upon inquiry, the project applicant noted that this is the second time the project is returning to the WASC. During the first review, the WASC was concerned with the initial location's proximity to a liquefaction zone. Additional geotechnical testing was done to validate the project drainage area and the project location was moved away from the liquefaction zone.

Member Sean Singletary posed the possibility of funding only the design phase of the Baldwin Vista Green Streets Project, but District staff explained that partial funding cannot be limited to a certain phase of the project as the developer would have to deliver the entire project as submitted in the application.

Member Hamamoto and Co-Chair Santilena discussed the cost implications if the Baldwin Vista Green Streets Project had to return to the WASC again, taking into consideration the potential SCW Program pause and subsequent escalation rates of returning in 2025. Member Hamamoto noted that excluding the project from this year's SIP would give the proponent time to finish design, mitigating the risk of a future PMR but increasing the risk of higher construction costs due to the timeline delay. Member Hamamoto suggested that this project would be the one to exclude if the WASC wanted to prioritize reserved funds but noted support for these types of projects generally. Member Hamamoto shared that regarding cost volatility for these types of drywell projects, the County of Los Angeles Public Works had underestimated costs before and was forced to use internal funds during periods of high inflation.

Fossum noted that while there is no certainty in what projects will come to the WASC in the future, the Watershed Coordinators are a resource to help identify projects that are in conceptual phases for the TRP process, which may eventually return as IP project applications.

7) Public Comment Period

There were no public comments.

8) Voting Items

a) Final FY24-25 SIP recommendations for the CSMB Watershed Area and submission to the Regional Oversight Committee for review

Member Campos made a motion for the approval of the FY24-25 Stormwater Investment Plan to include the Baldwin Vista Green Streets Project, the Drywells SS, the Street Sweeping SS, the 2 PMRs, and the two Watershed Coordinator budgets. Member Reznik seconded the motion. Member Hamamoto's friendly amendment to remove the Baldwin Vista Green Streets Project from the motion was not accepted. The motion passed, with 14 votes in favor, 0 votes in abstention, and 0 votes in opposition (approved, see vote tracking sheet attached).

9) Items for Next Agenda

The next meeting is scheduled for Tuesday, May 7, 2024, 1:00pm – 3:00pm and will be hybrid, held in person at Culver City Hall and online via WebEx. See SCW Program website for meeting details. Items on the next agenda may include:

a) Updates from ongoing Scientific Study Proponents
b) Quarterly Reports summaries

Member Campos asked the Baldwin Vista Green Streets Project applicant to provide courtesy updates to the WASC regarding community engagement efforts of the project. The project applicant noted that the Committee's comments have been received and that the team will make a note to highlight community engagement updates at each quarterly update.

10) Adjournment

Co-Chair Santilena thanked WASC Members and the public for their attendance and participation and adjourned the meeting.

CENTRAL SANTA MONICA BAY WASC MEETING - April 2, 2024

		Quorum Present				Voting Items			
Member Type	Organization	Primary Member	Attendance: In-person ("x" for present)	Alternate Member	Attendance: In-person ("x" for present)	Approval of February 6, 2024 Meeting Minutes	Approval of FY24-25 Stormwater Investment Plan (Baldwin Vista IP + Identifying Best Practice Drywell SS + Street Sweeping SS + 2PMRs + 2WCs)	Voting Item 2	Other Attendees
Agency	Los Angeles County Flood Control District	Marcela Benavides		Mark Beltran	x	Y	Y		Alex Bennett, Rob Garcia
Agency	West Basin Municipal Water District	E.J. Caldwell		Matthew Veeh					Angineh Shahnazarian, Ryan Parks
Agency	Los Angeles City Water & Power	Delon Kwan		Art Castro					Babetta Aguirre, Ryanna Fossum
Agency	Los Angeles City Sanitation and Environment	**Susie Santilena**	x	Hubertus Cox		Y	Y		Brenda Ponton, Sara
Agency	Los Angeles City Recreation & Parks	Cathie Santo Domingo		Darryl Ford	x	Y	Y		Chris Minton, Sara Castro
Community Stakeholder	Los Angeles County Chief Sustainability Office	**Rita Kampalath**	x	Rebecca Ferdman		Y	Y		Conor Mossavi, Serena Zhu
Community Stakeholder	PSOMAS / Business Sector	Ion Cretu	x			Y	Y		Evelyn, Valeria Arteaga
Community Stakeholder	The Solutions Project / SCOPE	Gloria Walton		Gloria Medina	x	Y	Y		Giselle Ramirez, Wendy Dinh
Community Stakeholder	Los Angeles Waterkeeper	Bruce Reznik	x	Maggie Gardner		Y	Y		Gus Orozco
Community Stakeholder	United Way of Greater Los Angeles	Edgar Campos	x			Not Present	Y		Irma Munoz
Municipal Members	Beverly Hills / West Hollywood	Josette Descalzo		Matthew Magener	x	Y	Y		Irma Munoz
Municipal Members	Culver City	Sean Singletary	x	Yanni Demitri		Y	Y		Jocelyne Flores
Municipal Members	Los Angeles	Roberto Perez	x			A	Y		Johanna Chang
Municipal Members	Los Angeles	Rafael Prieto		Blayne Sutton-Wills	x	Y	Y		John Bodenchak
Municipal Members	Los Angeles	Michelle Barton	x	Ryan Jackson		Y	Y		Joyce Amaro
Municipal Members	Los Angeles County	Bruce Hamamoto	x	Geremew Amenu		Y	Y		Maggie Gardner
Municipal Members	Santa Monica	Joshua Cavalho		Selim Eren					Margarita Aguilar
Watershed Coordinator	Heal the Bay	Meredith McCarthy	x			N/A	N/A	N/A	Paige Bistromowitz
Watershed Coordinator	SGA Marketing	Vanessa Boudreau	x			N/A	N/A	N/A	Paul Mead
	Total Non-Vacant Seats	17			Yay (Y)	12	14	0	
	Total Voting Members Present	14			Nay (N)	0	0	0	
	Agency	3			Abstain (A)	1	0	0	
	Community Stakeholder	5			Total	13	14	0	
	Municipal Members	6				Approved	Approved	Not Approved	

Central Santa Monica Bay
Watershed Area Steering Committee Meeting
COMMITTEE MEMBER AND ALTERNATE SIGN-IN: APRIL 2, 2024

SAFE CLEAN WATER

Member Type	Member Name	Municipality/ Organization	Role	Signature
Agency	**Marcela Benavides**	Los Angeles County Flood Control District	P	
Agency	**Mark Beltran**	Los Angeles County Flood Control District	A	
Agency	**E.J. Caldwell**	West Basin Metropolitan Water District	P	
Agency	**Matthew Veeh**	West Basin Metropolitan Water District	A	
Agency	**Delon Kwan**	Los Angeles City Water & Power	P	
Agency	**Art Castro**	Los Angeles City Water & Power	A	
Agency	**Susie Santilena**	Los Angeles City Sanitation and Environment	P	
Agency	**Hubertus Cox**	Los Angeles City Sanitation and Environment	A	
Agency	**Cathie Santo Domingo**	Los Angeles City Recreation & Parks	P	
Agency	**Darryl Ford**	Los Angeles City Recreation & Parks	A	
Community Stakeholder	**Rita Kampalath**	Los Angeles County Chief Sustainability Office	P	
Community Stakeholder	**Rebecca Ferdman**	Los Angeles County Chief Sustainability Office	A	
Community Stakeholder	**Alysen Weiland**	PSOMAS / Business Sector	P	
Community Stakeholder	**Cecilia Mokler**	PSOMAS / Business Sector	A	
Community Stakeholder	**Gloria Walton**	The Solutions Project / SCOPE	P	
Community Stakeholder	**Gloria Medina**	The Solutions Project / SCOPE	A	
Community Stakeholder	**Bruce Reznik**	Los Angeles Waterkeeper	P	
Community Stakeholder	**Maggie Gardner**	Los Angeles Waterkeeper	A	
Community Stakeholder	**Edgar Campos**	United Way of Greater Los Angeles	P	
Community Stakeholder				
Municipal Member	**Josette Descalzo**	Beverly Hills / West Hollywood	P	
Municipal Member	**Matthew Magener**	Beverly Hills / West Hollywood	A	
Municipal Member	**Sean Singletary**	Culver City	P	
Municipal Member	**Yanni Demitri**	Culver City	A	

Central Santa Monica Bay
Watershed Area Steering Committee Meeting
COMMITTEE MEMBER AND ALTERNATE SIGN-IN: APRIL 2, 2024

SAFE CLEAN WATER

Member Type	Member Name	Municipality/ Organization	Role	Signature
Municipal Membe	**Roberto Perez**	Los Angeles	P	
Municipal Member	**Rafael Prieto**	Los Angeles	P	
Municipal Member	**Blayne Sutton-Wells**	Los Angeles	A	
Municipal Member	**Michelle Barton**	Los Angeles	P	
Municipal Member	**Ryan Jackson**	Los Angeles	A	
Municipal Member	**Bruce Hamamoto**	Los Angeles County	P	
Municipal Member	**Geremew Amenu**	Los Angeles County	A	
Municipal Member	**Joshua Carvalho**	Santa Monica	P	
Municipal Member	**Selim Eren**	Santa Monica	A	
Watershed Coordinator	~~**Ava Farriday**~~ MEREDITH McCARTHY	Heal the Bay	WC	
Watershed Coordinator	**Vanessa Boudreau**	SGA Marketing	WC	

Central Santa Monica Bay
Watershed Area Steering Committee Meeting
PUBLIC SIGN-IN: APRIL 2, 2024

SAFE CLEAN WATER

First Name	Last Name	Municipality/Organization	Email Address
Mehrad	Kamalzare	Cal Poly Pomona	mKamalzare@CPP.edu
Johanna	Ortiz	CDS	Johanna.Valiente@lacity.org.
Roberto	Perez	CDS	roberto.perez@lacity.org.
Ali	Shahbazi	Cal Poly	
IDA	MEISAMI	UASAN	IDA.MEISAMI.FARD@UCLA.ed

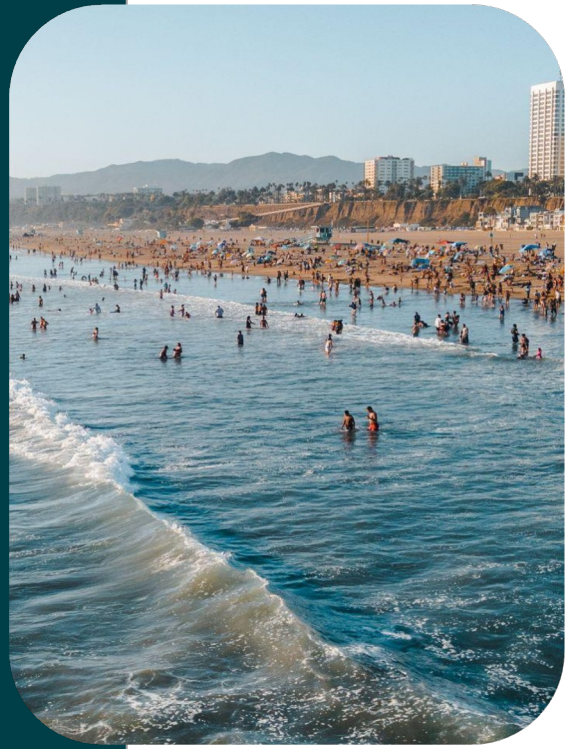
*Signing or completing this form is voluntary for members of the public

CENTRAL SANTA MONICA BAY

WASC MEETING - April 2024

Watershed Coordinators Presentation

Round 5 Application Recap



Heal the Bay

SAFE CLEAN WATER

sga MARKETING

Infrastructure Project Summary: Baldwin Vista Green Streets Project

Lead: City of Los Angeles
Total request: $9,076,647 over five years
Cost-share: $1,892,861 from Municipal Funds (17%)

Description: on Coliseum Street and surrounding area,

- 47 drywells
- ~450 sq. ft. of bioswales with native landscaping
- ~40 new street trees
- 7 educational displays

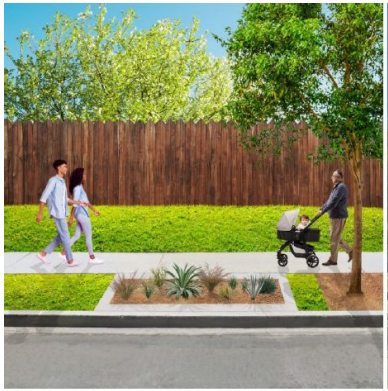
Benefits:

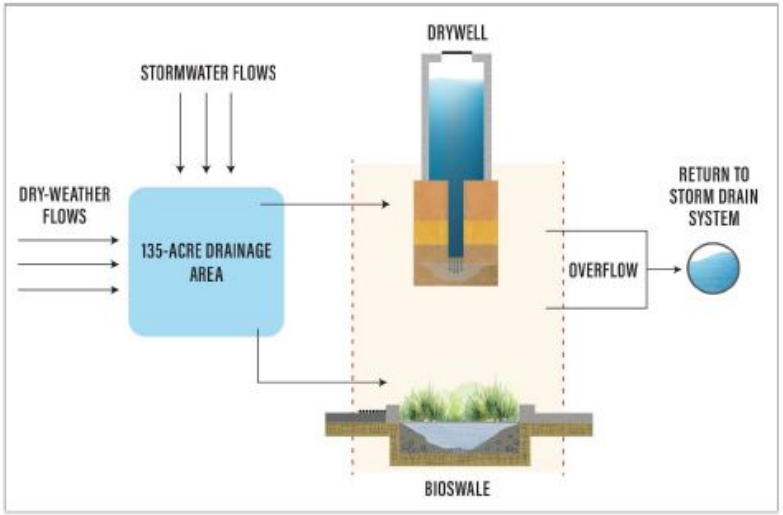
- 80% reduction in zinc, 100% reduction in trash
- Alleviated flooding issues in project area
- Aesthetic and environmental benefits such as increased shade and reduced heat island effect

Claimed Disadvantaged Community Benefit: YES

- Located within a DAC east of La Brea Avenue

Letters of Support: YES





Source: Cordoba Corporation

Scientific Study Summary #1

Identifying Best Practices for Maintaining Stormwater Drywell Capacity

Lead: California State Polytechnic University, Pomona
Location: at least one municipality from each Watershed Area
Total request: $4,951,453 over five years

- CSMB Watershed Area: $408,871

Expected Outcomes:

- Assessment of drywell design approaches, pre-treatment strategies, and maintenance
- Baseline for monitoring long-term performance and sustainability of drywells
- Outreach & engagement to ensure practical application of findings
- Engineering workforce development for disadvantaged and underrepresented groups
- Support regional stormwater management, water quality, and water supply goals

Scientific Study Summary #2

Street Sweeping Study

Lead: City of Los Angeles
Watershed Areas: Central Santa Monica Bay, South Santa Monica Bay, Upper Los Angeles River
Total request: $975,000 over three years; Cost share: $105,000 of Municipal Funds

- $173,550 for CSMB Watershed Area (over 3 years)

Expected Outcomes:

- Identification of potential enhancements to street sweeping toward improved downstream water quality
- Sweeper effectiveness testing: Generate information on the potential for new or different sweeping equipment
- Street dirt characterization: understand how pollutant levels and accumulation rates on street surfaces vary across the city based on land use, traffic volume, and watershed

Scientific Study Summary #3

Pollutant Source Characterization Study

Lead: City of Los Angeles
Watershed Areas: Upper Los Angeles River, South Santa Monica Bay, Central Santa Monica Bay
Total request: $3,500,000 over five years

- $623,000 over five years for CSMB Watershed Area

Expected Outcomes:

- Data to be utilized directly in the configuration and calibration of water quality models for improved accuracy and precision
- Data could help permittees optimize implementation of source control BMPs and support non-structural source control actions
- Opportunity for water and environment workforce development and community awareness

PMR: Ballona Creek TMDL Project

Lead: City of Los Angeles
Total revised project cost: $77M ($15M secured to date from the SCWP regional program)
Additional SCW funds requested: $7M ($3.5M for FY 24-25)
Project phase: Construction

Project objectives:

- Meet dry-weather bacteria TMDL for Ballona Creek
- Improve public health in downstream Ballona Estuary and Santa Monica Bay
- Provide new source of water to Hyperion Water Reclamation Plant for recycling and beneficial reuse

Additional funding information:

- Cost-share: $50M secured from General Funds, Municipal SCWP funds, Prop O, Caltrans, and a Project Partner Agencies MOU
- PMR request represents 15% of funding deficit
- Increased project costs due to inflation and OSHA/Federal Army Corps permit requirements

FY	Original Allocation	Additional PMR Requested Funds	Revised Total Request	Funds Status
FY21-22	$3,000,000	$ -	$3,000,000	Funds disbursed
FY22-23	$3,000,000	$ -	$3,000,000	Funds disbursed
FY23-24	$3,000,000	$ -	$3,000,000	Disbursement in progress
FY24-25	$3,000,000	$3,500,000	$6,500,000	Current SIP
FY25-26	$3,000,000	$3,500,000	$6,500,000	Future SIP
TOTAL	**$15,000,000**	**$7,000,000**	**$22,000,000**	

PMR: MacArthur Lake Rehabilitation Project

Lead: City of Los Angeles
Total revised project cost: $31M ($20M secured to date from the SCWP regional program)
Additional SCW funds requested: $11M ($4M for FY 24-25)
Project phase: 50% design stage (design planned for June 2024)

Project objectives:

- Meet TMDL limits for the Ballona Creek watershed and current NPDES permit
- Improve lake water quality while enhancing public health and CIBs

Key Project Modifications:

- Increased treatment filter capacity from 900 gpm to 1,800 gpm
- Zinc removal decreased from 100% to 84%
- Water supply decreased from 129.5 AF/yr to 88.4 AF/yr

FY	Original Allocation	Additional PMR Requested Funds	Revised Total Request	Funds Status
FY20-21	$ 2,000,000	$ -	$ 2,000,000	Funds disbursed
FY21-22	$ 2,000,000	$ -	$ 2,000,000	Funds disbursed
FY22-23	$ 9,397,900	$ -	$ 9,397,900	On-hold - CEQA
FY23-24	$ 4,697,900	$ -	$ 4,697,900	On-hold - CEQA
FY24-25	$ 1,947,918	$ 4,000,000	$ 5,947,918	Current SIP
FY25-26	$ -	$ 4,000,000	$ 4,000,000	Future SIP
FY26-27	$ -	$ 3,000,000	$ 3,000,000	Future SIP
TOTAL	**$ 20,043,718**	**$ 11,000,000**	**$ 31,043,718**	

Additional funding information:

- Cost Share: $11.8M from Municipal Funds and Prop K. Have also applied to additional state funds.
- Increased project costs due to inflation and escalation costs (operations staff, and existing infrastructure regulations).

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

1. Proposal identification information and summary of the project goals.

Title: **Street Sweeping Study**

Proposing Organization: **City of Los Angeles**

Your summary of the Project Goals and Objectives:

The reviewers see the goal of the proposer was to identify enhancements to the street sweeping program of City of Los Angeles with the aim of improving water quality. The objectives are specifically focused on (a) method of sweeping as with a variety of street sweeping machines, (b) where to sweep, which is influenced by data collected on a range of street types with varying conditions, and (c) when to sweep or street sweeping frequencies which is influenced by data collected regarding contaminant and trash loading on various streets. The focus is not on stormwater capture, rather, it is focused on pollutant source control.

2. Are the objectives clearly stated? What portion of the objectives need more clarification?

   All four reviewers agreed that the project's objectives are clearly stated and none of them have any objections or concerns. One reviewer stated that the methodology by which objective 1 would be completed could be more thoroughly discussed. Two reviewers expressed concerns that the study mentions the need to build on previous studies, but this is not clarified in Section 2.2 or any part of the study. One of these reviewers expressed concerns regarding the city's ability to obtain the latest street sweeping machines and the study was not clear on how it will have access to them for the study.

3. How do the project goals directly support a nexus to increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

   The reviewers agree that the project effectively supports the SCWP's goals of reducing stormwater urban runoff pollution. One of the reviewers expands on this by saying that the study accomplishes this task by providing information on how, where, and when to remove solid particle contaminants from the urban surface. In addition, another reviewer emphasizes that street sweeping practices are by far the most cost-effective way to reduce pollution in urban runoff as it involves collecting pollutants at the source.

4. What is (are) the overarching technical approach element(s) of the proposed project as you understand them (not necessarily the same as the elements described in the proposal)?

   The reviewers all agreed that the proposed study has at its core the evaluation of a range of types of street sweepers with the aim of determining the optimal choice for given areas of the city. In addition, individual reviewers added such aspects of the technical approach as assessing dirt loading and characterization, presence of dirt before and after street sweeping, dirt accumulation rate over time, consideration of local land use, development of sweeper routes and frequency based on heat maps, and planning for street sweeping that reduces pollution overtime.

5. Has the proposal provided sufficient information to describe the technical approach for each element? If not, what information is missing?

   Two of the reviewers expressed complete satisfaction with the detail provided for the methodological/technical approach of the study, but there are questions regarding the approach, and they would like to see more clarification on site selection methodology and the determination of the effectiveness of the sweepers. The other two reviewers expressed concern regarding sufficient information for describing the technical approach. One of them cited that further information on how sample analysis collection and comparison of sweepers will occur while the other reviewer would like clarification on how the city will have access to the equipment and this reviewer would like to see the assessment of the results of the previous studies. Additional concerns from 1:00 reviewer where that the methodology there's not provide much information regarding which samples will be tested for contamination. A list of contaminants is provided including heavy metals, PCBs, PAHS, FIB etcetera, but the method and the laboratory facilities where samples will be analyzed is not mentioned.

6. Is the technical approach sound? If not, what do you recommend should be done to improve the technical approach of the proposed project?

   All reviewers expressed general satisfaction with the technical soundness of the proposal. While one of the reviewers expressed the same concerns that were expressed in Question 5 such as the determination of the effectiveness of the sweepers. Another expressed concerns regarding maintenance impacts for sweeping efficacy. One reviewer expressed anecdotal concerns about accounting for blown dirt particles during street sweeping, which can make post-street sweeping assessments of remaining dirt inaccurate.

7. How achievable are the study's stated technical objectives, especially within the proposed timeframe and budget?

   Three reviewers agree that the study is achievable within the planned timeframe and budget. While one reviewer noted that the timeframe is certainly possible within the proposed time frame, it becomes difficult to assess how realistic the technical components are because the number of site locations for field testing and the number of experimental runs at the control site are not known This reviewer also expressed concerns about the cost of the sweepers, lab info, where, cost, number of samples, and replicates as none of these details are present in the proposal. In addition, concerning the budget, this reviewer was more pessimistic than the others and felt that the budget lacks the specificity needed to assess whether the proposed amounts can meet project needs.

8. What are the greatest technical risks that you foresee the proposing agency facing when implementing the project?

   Three reviewers agreed that the project faces very low or no technical risks if the data is collected appropriately according to existing protocols. Another reviewer states that with respect to data collection, there is no technical risk if the data is collected appropriately according to current protocols. A very effective street sweeping program can emerge from this study that can function for years to come, and the conclusions can be generalized beyond the LA region. It is unclear whether the newer street sweeping equipment will be available to the city for this project,

affecting whether data will be collected with the newer technologies. This concern was echoed by another reviewer as well. This relates to the first objective of the project. Yet another reviewer expressed concerns about the comprehensiveness of dirt sampling and eliminating measures from the controlled environment that can be effective in real-world scenarios.

9. Please describe the linkages between the project's technical objectives and the types of decisions stormwater managers will make based on the project's outcome(s)? Will the technical achievements provide stormwater managers useful linkages that extend beyond this study?

   The reviewers all agree that collecting new data can lead to planning changes by stormwater managers in the deployment of street sweepers that ultimately remove more significant amounts of street pollutants and sediment before they come to be washed down drain inlets. Furthermore, one reviewer notes that the study will provide stormwater managers with valuable information about the types and concentrations of pollutants in street dirt in the City of Los Angeles, and the study will make available recommendations for how these contaminants can most effectively be removed. A secondary linkage would be the categorization of city streets by contaminant levels, which permits a better understanding of the spatial distribution of source pollution.

10. Please provide any additional technical perspectives you would like to share.

    One reviewer had no additional comments. The points made by other reviewers were as follows: one possible outcome of the study would be the discovery of accumulation rates that appear to outpace street sweeping frequency. In this case, it may be helpful for the investigators to consider particle loading between storm events and compare this wet season accumulation rate pattern with the dry season accumulation rate curve induced by sweeping. Another reviewer suggested a characterization study of the variables to be considered so as to determine the heat maps. The reviewer further stated that the proposal did not indicate how these would be controlled as part of the sampling task. Yet another reviewer says that the project needs to develop a model that would consider the data collected and the study needs to develop an effective parking policy that assures that streets come to be swept on an optimized schedule.

11. Please answer each of the following questions by selecting one of the following five answer choices: *Excellent, Very good, Adequate, Inadequate or Not applicable because of insufficient information*. Please add an explanation to accompany your answer choice (or refer to the question number above for appropriate context and rationale):

    a. How well do the proposal objectives address the County's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

       Three reviewers noted this measure as being 'very good,' and one rated it 'excellent.' Comments from the reviewers included that the project provides a direct connection to reducing urban runoff pollution by quantifying the amount of dirt on the streets. This project has embedded practical BMPs that could be utilized further to reduce stormwater pollution and the outcomes of this study. Another reviewer states that street sweeping is a popular BMP used by many agencies to control the pollutants in urban runoff, a desirable goal. Another noted that the project leads the city to acquire

street sweepers with newer technology that is more efficient, as well as optimizing street sweeping frequencies in many neighborhoods. Another reviewer states that St. sweeping is a vital tool to be used in stormwater programs.

b. How well do you think the technical approaches will achieve the study objectives and stated outcomes?

Two reviewers assessed this measure as 'Adequate' as described. One of these states that it is uncertain that street sweepers with new technologies will be available for data collection in this project. The other reviewer with this rating points out the need for additional information on the technical approach, stating that sample analysis collection and comparison of St. sweepers uh needs further clarification. There is a question also from this reviewer about to serve particles that are not captured during vacuuming which are likely to reposition themselves on the roadway before a subsequent sampling occurs. Excellent was the assessment of one reviewer who states that the technical approach is appropriate and that it is likely to achieve the study objectives. Furthermore, this reviewer states that the project will test sweeper pickup efficiencies, and we'll evaluate their effectiveness in reducing contaminants from the street surface.

c. Technical experience and qualifications of the study team?

Three of the evaluators noted that this measure appeared to be not applicable in large part because of a lack of needed information to make an assessment. One reviewer noted excellent in light of the good literature review provided in this proposal.

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

1. Proposal identification information and summary of the project goals.

Title: **Pollutant Source Characterization Study**

Proposing Organization: **City of Los Angeles**

Your summary of the Project Goals and Objectives:

The four reviewers are in agreement that the project goal is to improve understanding of pollutant sources and inform more effective implementation of structural and source control BMPs in LA County. More specifically, the objectives entail improving water quality model configuration and supporting BMP planning with better choices as to structural and source control BMPs. The data set will be enhanced with stormwater sampling at key locations throughout the County at distinctly defined Hydrologic Response Unit (HRU) sites so as to render more accurate information about specific points on the mapping software than what it demonstrates now. The current data is over 20 years old, they assert, and it conflates different types of land uses together, rendering much information inaccurate with respect to stormwater runoff characteristics. The hydrologic response Units are smaller geographic units specifically defined as rooftop, roadway, and landscaped, among other specific characterizations of smaller land areas. Furthermore, the data set will be used to guide stormwater program managers and stakeholders about the selection, siting, and implementation of structural and source control BMPs.

2. Are the objectives clearly stated? What portion of the objectives need more clarification?

   The four reviewers agreed the objectives are clearly stated. They say the key aspect is updating the land use runoff characterization dataset used with the WMMS 2.0 software in LA County. The data set will be enhanced with stormwater sampling at critical locations throughout the County at distinctly defined Hydrologic Response Unit (HRU) sites. One reviewer states that clarification is needed concerning the methodology for collecting land use runoff data. Another feels that no further clarification is needed. Another asks about whether consideration was given to additional or emerging contaminants that may be a priority for stakeholders.

3. How do the project goals directly support a nexus to increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

   The four reviewers agree that the project links having updated datasets relating to stormwater runoff characteristics with better choice-making as per source control and structural BMPs that reduce runoff pollution.

4. What is (are) the overarching technical approach element(s) of the proposed project as you understand them (not necessarily the same as the elements described in the proposal)?

   The four reviewers agreed that by getting monitoring accomplished at specified HRU sites, new data could be entered into the WMMS 2.0 database to recalibrate the software and thus obtain better characterizations of runoff contaminants at given areas of the County. They have also indicated that the study proposes to include additional pollutants in the sampling to add additional

information to the database beyond what it currently contains. The study will take constituents into account and add more discreetly described (generally smaller) locations with more significant intervals of sampling. The precise method, locations, and constituents to be analyzed would be developed in the work plan (Task 1), says one reviewer.

5. Has the proposal provided sufficient information to describe the technical approach for each element? If not, what information is missing?

   Information regarding the technical approach is clear, in large part, say two of the reviewers. Two others say that the information provided is insufficient to understand how this study will be conducted. One reviewer noted that screenshots of how the results of a search would change with the updated dataset would be helpful to the evaluator.

6. Is the technical approach sound? If not, what do you recommend should be done to improve the technical approach of the proposed project?

   Two reviewers indicated that the technical approach is sound, and two said it was not. One reviewer who said the approach is sound says that the planned updated dataset based on focused monitoring should cause the WMMS 2.0 software to provide more accurate characterizations of stormwater runoff pollutants in any given area. Another reviewer, faulting the technical approach, says that it is unclear how the training would occur for participants engaged in this study. Another reviewer concerned about the technical approach says that the PFAS and microplastics are not mentioned in the proposal. This reviewer says these two pollutants are of significant concern with respect to water quality and public health. This would be an excellent opportunity to collect data on these pollutants in stormwater and as accumulations, says this reviewer.

7. How achievable are the study's stated technical objectives, especially within the proposed timeframe and budget?

   Four reviewers agree on the assessment that this study is not achievable to them because much detail concerning how this study would be carried out concerning all aspects of the timeline is not clear. One reviewer notes that the plan for getting monitoring and reporting done over three years is clear and a little ambitious but achievable from a planning standpoint. The amounts the project director and personnel would receive for their contributions are not clear. Would the project director be covered for released time for a regularly contracted position? Another reviewer notes that the tests are laudable, but it's unclear whether there is enough budget to train new personnel. Another reviewer says that there is considerable potential for schedule overruns and insufficient time to achieve components of the study, and that reviewer also mentions issues concerning training of the participants and having enough time and funding for the project writeup is not clear on the methodology and timeline for workforce development as well as impacts on the budget.

8. What are the most significant technical risks that you foresee the proposing agency facing when implementing the project?

   The four reviewers noted that there are serious concerns with respect to the training of the workforce. One reviewer states concern about adequate training of personnel who would conduct the sampling and perform the data entry/reporting. Another reviewer states that risk is the

question of the validity or the representation of data if time and budget are insufficient to cover proper workforce development. Yet another reviewer notes that this study will be challenged by having enough personnel to carry out all of the planned sampling events. This reviewer asks about what Plan B might be.

9. Please describe the linkages between the project's technical objectives and the types of decisions stormwater managers will make based on the project's outcome(s)? Will the technological achievements provide useful linkages beyond this study to stormwater managers?

   The reviewers noted that as long as the dataset becomes more accurate with respect to stormwater quality characterizations in terms of specific pollutant loading expectations, stormwater manager choices as to structural and source control BMPs could become more appropriate in areas selected via the use of WMMS 2.0. The value of the updated and recalibrated software depends on how much or how often stormwater managers make use of it. One reviewer notes that the completed work would give stormwater managers and stakeholders a better understanding of existing contaminants in stormwater. Another reviewer comments that new data would provide for better modeling planning, design implementation, and monitoring of BMPs in the future. This reviewer also states that the results could lead to more effective stormwater policies among the permittees.

10. Please provide any additional technical perspectives you would like to share.

    One reviewer notes that having a complete data set to work from in the WMMS 2.0 model seems to be an essential element for an effective stormwater program, and this project helps toward that end. Another reviewer states that to be determined is the extent to which stormwater managers actually use the WMMS 2.0 software while making decisions about BMPs to install. Two reviewers did not add additional information.

11. Please answer each of the following questions by selecting one of the following five answer choices: *Excellent, Very good, Adequate, Inadequate or Not applicable because of insufficient information*. Please add an explanation to accompany your answer choice (or refer to the question number above for appropriate context and rationale):

    a. How well do the proposal objectives address the County's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

       'Adequate' was the assessment of three of the reviewers as to how well The objectives serve county goals. One evaluation was 'very good' with the caveat that it only has value if the permittees act on the data.

    b. How well do you think the technical approaches will achieve the study objectives and stated outcomes?

       Two reviewers assessed the technical approaches as 'inadequate', citing issues with the amount of detail provided to demonstrate how this study would be completed to render the results usable. One reviewer says that this technical approach would be 'excellent' if personnel needs are met and, the work plan is clear. If the sampling and

data collection are performed as described, the objectives are de facto achieved since this is essentially a data-gathering exercise. Another reviewer says the technical approach is 'very good' if the study goals are met.

c. Technical experience and qualifications of the study team?

The assessments were mixed as to the technical experience and qualifications of the study team. Clearly, the proposer is highly qualified for this study, says one reviewer. This study depends upon many personnel to carry out the various aspects of the study, and very little information is provided about the expertise of the personnel who would be charged with carrying out the multiple aspects of this study, says another reviewer.

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

1. Proposal identification information and summary of the project goals.

Title: **Identifying Best Practices for Maintaining Stormwater Drywell Capacity**

Proposing Organization: **California State Polytechnic University, Pomona**

Your summary of the Project Goals and Objectives:

The reviewers were extensively in agreement that the goal of the proposed study purportedly is to evaluate various drywell designs and their infiltration rates, to evaluate pre-treatment practices, and evaluate drywell maintenance practices. Reviewers were in agreement that It further has as its goal the making of recommendations regarding the choice of drywell design and maintenance practices that can optimize drywell capacity and efficiency. The reviewers largely noted that the stated objectives further detail how drywell designs, pre-treatment methods, and maintenance practices will be assessed. The reviewers acknowledged that the objectives further take into account local land use and traffic volumes as well as the measurement of stormwater infiltration rates over a five-year period at drywell locations in each of the nine watershed areas. One reviewer notes that data obtained from a successful study of this type would be disseminated through various platforms including integrating the material learned in future engineering college courses.

2. Are the objectives clearly stated? What portion of the objectives need more clarification?

   Three of the reviewers made known that the objectives were clearly stated. They assert through their statements that the objectives encompass assessing optimal choices in terms of cost and benefit for construction, pre-treatment, and drywell maintenance as well as determining the influence of soil characteristics on the design and maintenance of drywells. One reviewer asserted that the objectives were only moderately well stated noting that the protocol for dry well selection is well stated and that would allow for a comparison across construction types. However, this reviewer further states that the timing of a sampling and overall experimental design could be more clearly discussed. In addition, this reviewer notes that several objectives seem to be dependent on the degree of maintenance performed on each dry well. It should be understood that these dry wells are not managed by the proposer of the study. And so, this reviewer feels that the sampling will be somewhat ad hoc rather than accomplished at predetermined times with set intervals which would make it difficult to make direct comparisons between dry wells of differing construction types.

3. How do the project goals directly support a nexus to increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

   The reviewers were all in agreement that the proposed study is heavily focused on identifying effective drywells that maximize runoff capture. Derived from their various statements is the point that pre-treatment devices that are found to be attached to existing drywell installations will be studied for their effectiveness at removing trash and pollutants before infiltration of runoff, hence the link between runoff capture and water quality. One evaluator further notes that in some cases, street runoff capture with drywells in urban areas with limited right of way presents the only practical alternative making this a valuable study.

4. What is (are) the overarching technical approach element(s) of the proposed project as you understand them (not necessarily the same as the elements described in the proposal)?

   The four reviewers were in agreement about the project in that it uses an evaluation design that is extensively empirical in nature while also benefitting from interview responses from local stakeholders who have had charge of the construction and maintenance of watersheds in the region. The reviewers have captured the supporting technical design element in which it is stated that the proposed study will benefit from a literature review as well that further informs the study about the effectiveness of drywells over time

5. Has the proposal provided sufficient information to describe the technical approach for each element? If not, what information is missing?

   Two of the reviewers stated that it was strong in assessing water infiltration rates utilizing a model provided by Kindred and Reynolds. They state that the elements for studying well capacity are valid for this purpose and informative with respect to indicating the effectiveness of the types of drywells to be studied. It would be good to see the specific formulas used for measuring infiltration rates. Two reviewers note that there are problems with the information provided. One of them asks: What's missing? A valuable contribution to the endeavor of capturing stormwater runoff would be an evaluation of the quality of the water that is infiltrated via drywells to assess the safety of that water for subsequent well withdrawal and use. Loading of e-coli, fertilizers, pesticides, metals, and other pollutants besides sediments needs to be understood when infiltrating water into drywells and other ground recharge devices. Infiltrated water needs to be monitored in terms of specified standards from the EPA and/or the CA State Water Board. The case is made for the benefits of reducing trash and sediment pollution to local water bodies through the establishment of drywells with pre-treatment devices. However, there was no discussion on empirical testing of groundwater and pollutant loading of infiltrated stormwater. Also missing is a thorough discussion of how the pre-treatment devices would be studied as no criteria for studying them is proposed. Another reviewer states that the detail is lacking as to how infiltration rates will be measured and calculated using pressure transducers. Another reviewer notes that it is unclear who will be conducting the infiltration testing this reviewer states from reading the material that it will be done by Kindred Hydro incorporated, but their letter of support does not explicitly state that they will do so.

6. Is the technical approach sound? If not, what do you recommend should be done to improve the technical approach of the proposed project?

   The reviewers were in large part unhappy with the technical approach noting a variety of aspects that seemed to be missing but would be required for carrying out a study of this kind. Planned assessment of infiltration rates is sound. No plan is mentioned for assessing pollutant loading or assessment of pre-treatment devices that are in use at the selected drywell sites. Pre-treatment of stormwater runoff is noted to be an aspect of many drywell BMPs, however, this component does not appear in the effectiveness evaluation of the drywells to be studied here. One reviewer further states that there are confounding variables in this study, for example, it will be difficult from this study to determine whether specific drywells are successful to the extent that they are due to environmental factors such as land use. The question also arises for this reviewer about the extent

to which the following variables impact the success of a drywell, such as that of clogging and concentration of bacteria, versus such design factors as wells with and without pre-treatment, maintenance schedules, and age of drywell. Another reviewer notes that documentation is an issue. This reviewer would like to know what that term really means, will documentation be digital data such as application-based photos, video, etc.? Also, it is noted that the approach to pretreatment methods is not discussed, and pretreatment efficacy needs to be addressed. Another reviewer notes that it would be good to see paired sampling to understand which factors play the greatest role in optimizing drywell performance.

7. How achievable are the study's stated technical objectives, especially within the proposed timeframe and budget?

   Three of the reviewers believe that the study's technical objectives are achievable. The plan for studying optimal infiltration of drywells is achievable, certainly, they say. The plan to assess infiltration rates over a five-year period is long enough to detect change over time. The calculations and the equipment to be used for assessing flow and infiltration should certainly function well for assessing the drywell capacity they have indicated. One of these reviewers further states that the proposed budget indicates that the objectives are achievable and the indirect cost being negotiated at 47% works for this purpose. The budget, it is said, appears to be feasible for the proposed approach and the minor modifications that may be needed during study implementation. One of the reviewers is skeptical about whether the technical objectives are achievable. This reviewer notes that there was no cost breakdown by task. This reviewer notes that there is a 47% markup for indirect costs and beyond and that it's not clear how this budget is being allocated.

8. What are the greatest technical risks that you foresee the proposing agency facing when implementing the project?

   Technical risks stated by three of the four reviewers relate to whether the best locations are included in the study for evaluating drywell capacity. The process for selecting drywells is affected by traffic density and other variables that could prevent valuable information from being obtained from drywells at vital locations. One reviewer further states that there are issues with separating out confounding predictor variables in this study. Permitting challenges, getting sufficient water from nearby sources such as fire hydrants to test infiltration rates count among the challenges noted by one reviewer. Some inconvenience to residents and motorists would be incurred when fire hydrants are opened to run water which could lead to temporary street flooding says this reviewer.

9. Please describe the linkages between the project's technical objectives and the types of decisions that stormwater managers will make based on the project's outcome(s)? Will the technical achievements provide stormwater managers useful linkages that extend beyond this study?

   The four reviewers agreed that the data gathered, plus the review of the literature and the sharing of experiences by stakeholders will point to improving best practices for sure with respect to construction and maintenance of drywells. This study should lead to better decisions regarding types of drywells to construct that are efficient and sensible in terms of management and maintenance they say. One reviewer also states that enhancing knowledge about pre-treatment and maintenance requirements will help with long-term planning and pollutant load reduction.

Another reviewer further states that the professional development of civil engineers and the further incorporation of stormwater engineering in the curriculum at universities will be an added benefit.

10. Please provide any additional technical perspectives you would like to share.

    One reviewer did not add information. The remaining reviewers presented a diversity of added comments. One stated that evaluation of pollutant loading after pre-treatment of stormwater runoff needs to be more carefully integrated into effectiveness studies of drywells. The assessment of pretreatment of urban stormwater runoff is obligatory when assessing the overall effectiveness of drywell infiltration devices says this reviewer. One reviewer states that information learned from such a study should be made available on the web since this information is very much needed. This writer further states that an update of the drywell design fact sheet in the County LID manual would be helpful. This writer and another further state the importance of this Information for curriculum and stormwater engineering students. Another reviewer states that the use of drywells in limited space areas is ideal if the conditions are right. By adding additional knowledge to design requirements and needed conditions, more optimal uses of drywells could be obtained. Additionally, understanding pretreatment is an important part of promoting efficiency as well as the long-term health of a drywell system, says this reviewer. In the study, says another reviewer, it should be noted how pretreatment efficacy is being defined. The costs are not well explained. For this reviewer, the question comes up as to whether the life cycle costs of the pretreatment device along with costs associated with the drywell implementation are clearly defined.

11. Please answer each of the following questions by selecting one of the following five answer choices: *Excellent, Very good, Adequate, Inadequate or Not applicable because of insufficient information*. Please add an explanation to accompany your answer choice (or refer to the question number above for appropriate context and rationale):

    a. How well do the proposal objectives address the County's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

       One reviewer assesses the objective of satisfying County goals as 'excellent'. The other three reviewers assessed this variable as 'Very good' for increasing capacity while reducing trash and sediment contaminants that would otherwise form part of community stormwater runoff. One of these reviewers stated that the project provides detailed design specifications and maintenance recommendations for drywells. It is further stated that adjustments to cleaning schedules and construction techniques when made, could potentially inform the rest of the country.

    b. How well do you think the technical approaches will achieve the study objectives and stated outcomes?

       Three of the reviewers responded 'very good' to this question. They are all cognizant of the point that the technical approaches will lead to a greater understanding of how to optimize drywell capacity as well as make better choices regarding their design and maintenance. Another evaluator cautions that there is a minor risk of some gaps remaining but since this is the first study of its kind, this is something to be expected.

One evaluator rated the study as "adequate" with regard to how well the technical approaches will address the stated outcomes and objectives of the study.

c. Technical experience and qualifications of the study team?

Two reviewers rated the qualifications of the study team as 'Excellent'. The team is highly qualified with university academics they say. They further state that the team will also benefit from relationships with qualified storm drain managers in the involved municipalities who will provide their professional input that is based on experience with the construction and maintenance of the devices. Also, trained university students will assist with gathering the needed data. One reviewer notes that the principal investigator has the necessary background to complete this study. Two reviewers rated the study team with the term 'not applicable'. One of them states that their technical experience and qualifications are not provided. Another states that while the institution is very well established in the field of engineering, the study team itself cannot be wholly analyzed from the information provided.

PREFERRED PROJECT'S RANKING SURVEY RESULTS FOR FY24-25 SIP

	Program	Project Name	RECOMMENDATION TO INCLUDE PROJECT IN FY24-25 STORMWATER INVESTMENT PLAN (SIP)		
			INCLUDE	DO NOT INCLUDE	
1	IP	Baldwin Vista Green Streets Project	8	3	
2	SS	Identifying Best Practices for Maintaining Stormwater Drywell Capacity	9	2	
3	SS	Street Sweeping Study	8	3	
4	SS	Pollutant Source Characterization Study	7	4	
			ADDITIONAL FUNDING AMOUNT		PREFERENCES
6	PMR	MacArthur Lake Rehabilitation Project	YES (FULL AMOUNT)	$11,000,000	6
			YES (PARTIAL)	$1 - $2,750,000	0
				$2,750,001 - $5,500,000	1
				$5,500,001 - $8,250,000	2
				$8,250,001 - $10,999,999	0
			YES (NO ADD'L FUNDS)	$0	2
			NO	$0	0
7	PMR	Ballona Creek TMDL Project	YES (FULL AMOUNT)	$7,000,000	7
			YES (PARTIAL)	$1 - $1,750,000	0
				$1,750,001 - $3,500,000	0
				$3,500,001 - $5,250,000	1
				$5,250,000 - $6,999,999	0
			YES (NO ADD'L FUNDS)	$0	3
			NO	$0	0