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

Wednesday, November 17, 2021
1:00pm - 3:00pm
WebEx Meeting

Committee Members Present:
Cung Nguyen, LA County Flood Control District (Agency)
Robert Beste, Water Replenishment District (Agency)
*Christopher Lapaz, LA County Sanitation Districts (Agency)
*Darryl Ford, Los Angeles Recreation and Parks (Agency)
Craig Cadwallader, Surfrider Foundation (Community), Chair
Marissa Caringella, Santa Monica Bay Restoration Commission (Community)
Hany Fangary, Fangary Law Group (Community)
Wendy Butts, Los Angeles Conservation Corps (Community)
Eliza Jane Whitman, Carson (Municipal)
Susie Santilena, Los Angeles (Municipal)
*Thuan Nguyen, LA County (Municipal)
John Dettle, Torrance (Municipal)
*Wilson Mendoza, Torrance (Municipal)
Geraldine Trivedi, EWMP: Manhattan Beach (Municipal), Vice Chair
Heecheol Kwon, EWMP: Hawthorne (Municipal)
Ken Rukavina, EWMP: Rancho Palos Verdes (Municipal)
Nancy Shrodes, Heal the Bay (Watershed Coordinator, non-voting member)

*Committee Member Alternate

Committee Members Not Present:
E.J. Caldwell, West Basin (Agency)

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

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1. Welcome and Introductions

The District conducted a brief tutorial on WebEx.

Craig Cadwallader, Chair of the South Santa Monica Bay WASC, welcomed Committee Members and called the meeting to order.

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

2. Approval of Meeting Minutes from October 20, 2021

The District provided the meeting minutes from the previous meeting. Motion to approve meeting minutes, by Chair Craig Cadwallader, seconded by Member Robert Beste. The WASC voted to approve the meeting minutes (approved, see vote tracking sheet).

3. Committee Member and District Updates

District Staff provided an update, noting:

- The District is initiating the Regional Program Fund Transfer Agreement (FTA) process for projects that were approved for funding in Fiscal Year 2021-2022 Stormwater Investment Plan (SIP). Addendums to projects that were approved in Fiscal Year 2020-2021 SIP were also sent out.
- The Scoring Committee will continue to meet throughout December and January to re-score projects that needed to submit clarifying information.
- Municipal Program Reporting Module webinars are being conducted virtually for the annual report, which is due December 31, 2021. The webinar recording and Frequently Asked Questions (FAQ) will be posted on the District website at: https://safecleanwaterla.org/municipalities/
- The District sent out an email to the SCW Committees last week requesting vaccine information, and with additional information from the Board of Supervisors memo on vaccine requirements. Please refer to that email and respond back to the District.
- On November 2, the Board of Supervisors voted to continue meeting virtually, acting under the authority of Assembly Bill 361 which authorizes public committees to meet without complying with all the teleconferencing requirements of the Brown Act when the situation warrants it. The Board is reviewing every 30 days and will act to cover all the commissions and committees under their authority.

4. Watershed Coordinator Updates

Watershed Coordinator Nancy Shrodes provided an update, noting:

- Working with South Bay Council of Governments to give a Safe Clean Water Program (SCWP) 101 presentation in January.
- Reviewed a section about Coastal Cleanup Day in a year-end wrap-up book to be distributed soon.
- Met with Sacred Places Institute for Indigenous Peoples to discuss opportunities for Indigenous involvement in the SCWP.
- Attended a webinar about federal funding.
- Met with LA Sanitation and members of the Central Santa Monica and Upper Los Angeles River WASCs to discuss potential for collaboration.
- Attended Green School Yards working group meeting.
- Attended Recycle the Runoff webinar, which was informative and will be helpful when discussing potential projects with future stormwater project proponents.
- Been working with Eastview Park TRP team planning a visioning workshop that will engage park-goers to discuss what they would like from their parks.
- Attended a virtual townhall on Dominguez Channel, which is producing a rotten egg smell caused by anaerobic digestion of organic matters in the channel. Members of the public were concerned about potential long-term health effects and noted the need to reimburse community members who stayed in hotels.
- Hosting a “What Stormwater Can Do for You” event next week, December 9th,2021.
- Developing a social media plan to target zip codes in the watershed area. Distributing a monthly newsletter. Partner groups plan to support.
- Working with communications team to create SCWP website for distribution of info.
- Social Justice Learning Institute distributed 450 fliers last month and are working with local groups.

5. Public Comment Period

Richard Watson noted that the Regional Pathogen Study approved in FY 2021-22 SIP has since undergone additional revisions, partially in response to Southern California Coastal Water Research Project (SCCWRP) peer review last year. The District noted the Scientific Studies submitted for FY 2022 -2023 SIP

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again be reviewed by the SCCWRP peer review team and noted that the final deliverables will be available mid-March. Watson noted that additional information about potential constituents, monitoring sites, etc. was added for reviewers.

6. Discussion Items:

a) Ex Parte Communication Disclosure

Member John Dettle disclosed attendance at the monthly Beach Cities meeting along with Members Geraldine Trivedi and Doug Krauss.

b) Technical Resources Project (TRP) Presentations

i) Rebuilding Soils for Effective Nature-based Solutions
Presentation by Ariel Whitson of TreePeople
This study explores rehabilitating compacted soils to restore permeability as a nature-based solution to stormwater management

Member Dettle noted that $1 million would be needed for data collection and analysis and asked for clarification about what the project is doing and what the end result would be. Yujuan Chen of TreePeople replied that the end goal is long-term benefits to the ecosystem. This technique has been used on the east coast in Arlington, Virginia but not in the west coast. The study would investigate the effects of soil rehabilitation on tree growth, soil infiltration, soil moisture, and stormwater management under local conditions. The three-year study will collect data through field measurements and lab analysis involving soil quality, stormwater metrics, and vegetation growth. Manny Gonez, also of TreePeople, noted that several entities are involved with the project. Amir Haghverdi, UC Riverside, explained that the project aims to monitor soil metrics, including soil infiltration and hydraulic properties, which is time-consuming work. The budget would support the graduate student conducting the research and would fund the use of the equipment needed.

Member Dettle asked what is being measured and compared. Chen replied that costs will also go towards planting and maintenance of trees across three sites over three years. The project proponents will maintain and monitor three sites. Haghverdi added that side-by-side plots will be setup adjacent for comparison purposes. The study includes a control plot which will serve as a baseline to quantify improvements achieved through the rehabilitation process.

Member Beste asked if the study includes a cost analysis for cities and counties. Chen and Gonez replied that an economic analysis will not be provided and is not necessary, since the method is considered to be practical, inexpensive, and widely adoptable for both large and small areas. The plots in the study are roughly 10 feet by 10 feet.

Member Beste asked if the project expects the study results to differ from cases on the east coast. Chen said similar results are expected, and clarified that the goal is to assess compacted, urban soil. Another advantage of the technique is that it only needs to be conducted once—repetition will not be necessary down the line. Gonez noted that Arlington, Virginia's climate differs from that of Southern California. Member Beste asked if it is not a regional soils analysis. Chen replied they are using three sites to obtain more data to evaluate regional results and compare those to the data from Virginia. The study hopes to apply the results throughout LA County. Haghverdi noted that field-based studies are limiting, which is why computer models are useful. The project would simulate scenarios with different climates and rates of compaction.

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Member Heecheol Kwon asked how soil compaction changes infiltration rates. Chen said that soil would ideally have 50% pore space, but it is typically more compact. Less pore space causes a decrease in infiltration, which leads to stormwater runoff and less soil moisture. Compaction is an issue in Los Angeles and other urban areas. Chen shared that the results of the study would help guide project developers by providing information on how to improve soil characteristics and thus infiltration.

ii) Community Garden Stormwater Capture Investigation
Presentation by Diana Campos Jimenez and Juan Diaz-Carreras of the LA Community Garden Council
This Study will investigate how community gardens can function as stormwater capture facilities as well as opportunities through outreach.

Member Dettle asked for clarification about what the study aims to achieve. Juan Diaz-Carreras, Council board member, said the study will explore possibilities for garden restoration and stormwater collection and compile a list of criteria. Member Dettle suggested that community members aren't likely to support taking apart the community garden. Diaz-Carreras replied that the project includes community engagement and noted that many of the gardens have rudimentary infrastructure and could be built back in a more technically advanced way.

Member Marissa Caringella expressed concern that that site reconnaissance and outreach are scheduled to occur after a fair amount of project work has already taken place. Diaz-Carreras replied that they plan to conduct a preliminary desktop analysis to investigate where the project would be feasible. The next step would be to engage with the gardeners to determine how they feel and what they would be willing to accept. Diaz-Carreras noted that they want the community gardens to ultimately continue to function and serve the community.

Member Thuan Nguyen seconded the concern about whether gardeners would support the project. The Member also asked about limiting the scope and identifying specific gardens to work with up-front. Diaz-Carreras said they are open to ideas for improving dialogue with garden users and landowners. Member Nguyen suggested another option would be to exclude smaller gardens. The Member elaborated on their concern about investing money in a project that might not be carried out due to unfavorable feedback learned during the community engagement activities. Diaz-Carreras replied that engagement with 78 community gardens is a substantial effort which they do not have the resources to pursue right now. The study would include up-front work to consider the technical feasibility of sites to include in the study, size being one such characteristic. The study would then consider additional factors required to maintain functionality.

7. Public Comment Period

There were no public comments.

8. Voting Items

There were no voting items.

9. Items for Next Agenda

There will be presentations for four Infrastructure Programs.

10. Adjournment

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The District asked the Committee if they would like to cancel the December meeting and meet next in January. A meeting can be scheduled later in the month of December if needed. Chair Cadwallader agreed to cancel the December meeting.

Chair Cadwallader thanked WASC members and the public for their attendance and participation and adjourned the meeting.

Next Meeting:
Wednesday, January 19, 2022
1:00PM – 3:00PM
See SCW website for meeting details

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SOUTH SANTA MONICA BAY WASC MEETING - November 17, 2021

		Quorum Present				Voting Items					
Member Type	Organization	Member	Voting?	Alternate	Voting?	Approve Meeting Minutes For October 20th, 2021	Voting Item 1	Voting Item 2	Voting Item 3	Voting Item 4	Voting Item 5
Agency	LACFCD	Cung Nguyen	x	Ramy Gindi		a					
Agency	West Basin MWD	E.J. Caldwell		Alex Heide							
Agency	Water Replenishment District	Robert Beste	x	Esther Rojas		y					
Agency	LAC Sanitation District	Kristen Ruffell		Christopher Lapaz	x	y					
Agency	LA Recreation & Parks	Cathie Santo Domingo		Darryl Ford	x	y					
Community Stakeholder	VACANT										
Community Stakeholder	Surfrider Foundation South Bay Chapter	**Craig Cadwallader**	x	Mary Simun		y					
Community Stakeholder	Santa Monica Bay Restoration Commission	Marissa Caringella	x			y					
Community Stakeholder	Fangary Law Group	Hany Fangary	x	Justin Massey		y					
Community Stakeholder	Los Angeles Conservation Corps	Wendy Butts	x	Bo Savage							
Municipal Members	Carson	Eliza Jane Whitman	x			y					
Municipal Members	Los Angeles	Susie Santilena	x	Ilene Ramirez		y					
Municipal Members	LAC Public Works	TJ Moon		Thuan Nguyen	x	y					
Municipal Members	Torrance	John Dettle	x	Wilson Mendoza	x	y					
Municipal Members	EWMP: Beach Cities	**Geraldine Trivedi**	x	Doug Krauss		y					
Municipal Members	EWMP: Dominguez	Heecheol Kwon	x	Jesus Velazquez		y					
Municipal Members	EWMP: Peninsula	Ken Rukavina	x	David Wahba		y					
Watershed Coordinator	Heal the Bay	Nancy Shrodes	x			N/A	N/A	N/A	N/A	N/A	N/A
	Total Non-Vacant Seats	16			Yay (Y)	13	0	0	0	0	0
	Total Voting Members Present	16			Nay (N)	0	0	0	0	0	0
	Agency	4			Abstain (A)	1	0	0	0	0	0
	Community Stakeholder	4			Total	14	0	0	0	0	0
	Municipal Members	8				Approved	Not Approved	Not Approved	Not Approved	Not Approved	Not Approved

Other Attendees
Annelisa Moe
Ashleigh Townsend
Brad Parks
Brenda Ponton
Brett Perry
Bruce Reznik
Bryce Lee
Cameron Castillo
Capucine Hernandez
Chris Carandang
Christopher Rochfort
Conor Mossavi
Curtis Fang
Daniel Apt
Dave Sorem
Dee Corhiran
Fernando Navarrete
Greg de Vinck
greg sands
Gustavo Orozco
ilene ramirez
Jacky Cervantes
Jacqueline Mak
Jesenya Maldonado
Jim Rasmus
John Hunter
Katie m
Kirk Allen - LACFCD
Kirsten Schwarz
Larry Tran - LACFCD
Lorena Matos
Mary Breckell
Michael Scaduto
Michelle Kim
Michelle Staffield
Michelle Struthers
Nate Schreiner - Tetra Tech
Oliver Galang (Craftwater)
Roberto Perez
Ruben P
seth carr
shahram kharaghani
Sheila Brice
Simon Fowell
Sunshine Saucedo
Terrick Gutierrez
Thom Epps
Tori Klug
Trevor Davis
Vicki Smith
Vik Bapna - CWE
Wataru Kumagai
wendy dinh
yale

Rebuilding Soils for Effective Nature-based Solutions

Scientific Studies Program

TreePeople with UC Riverside and University of British Columbia

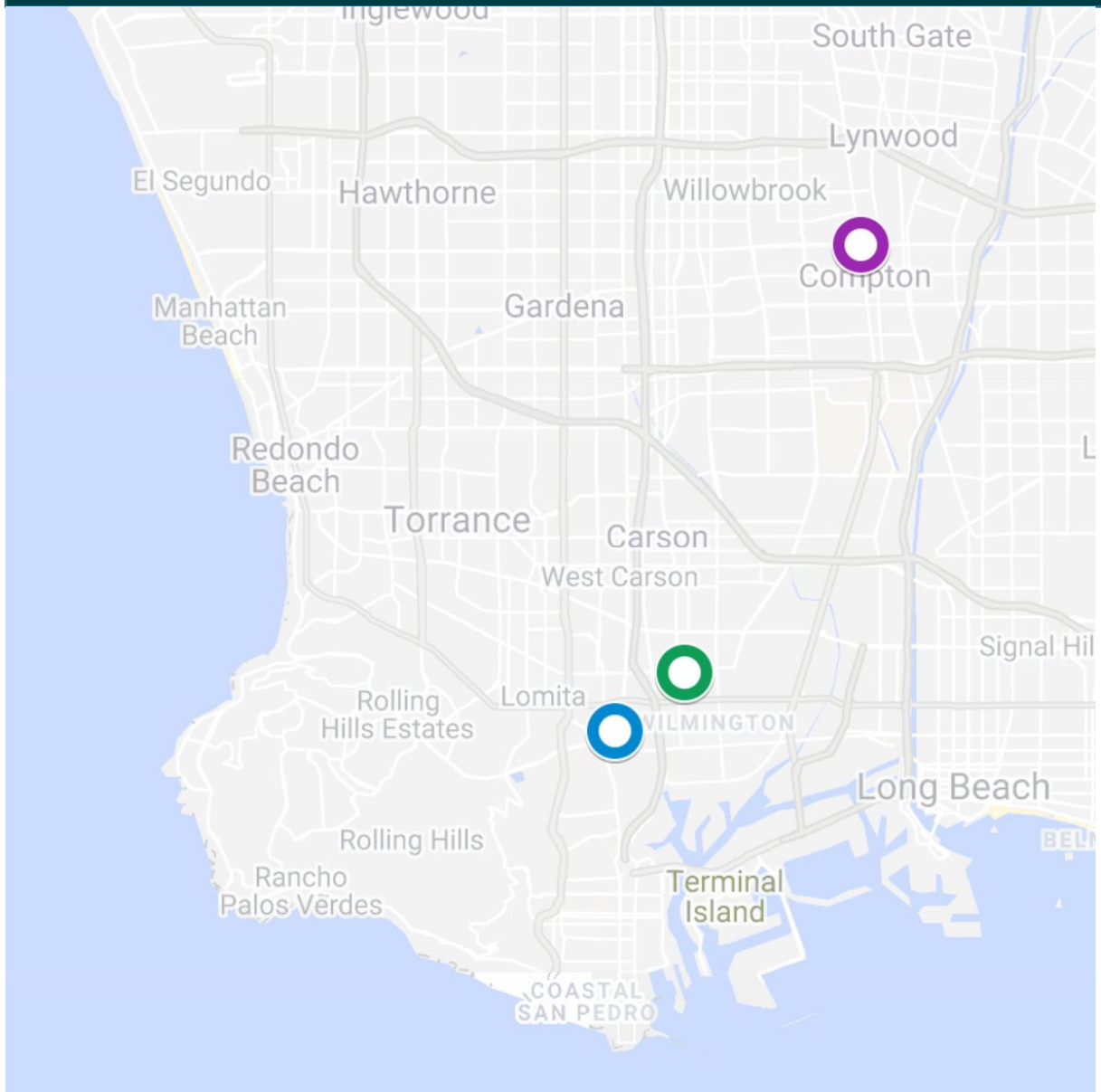
Ariel Whitson

Study Overview

This study explores rehabilitating compacted soils using soil profile rebuilding to restore permeability as a nature-based solution (NBS) to stormwater management.

This study seeks to expand NBS across more stormwater infrastructure projects to locations where existing soil conditions preclude their use. Through the increased use of NBS in stormwater projects, because of this study's soil techniques, stormwater will be mitigated, urban runoff will be reduced, and local water supply will be increased.

Study Location



3 Pilot Sites

- Ken Malloy Harbor Regional Park, City of LA Department of Recreation and Parks
- Wilmington Middle School, Los Angeles Unified School District
- West Rancho Dominguez, Green Streets Project, LA County Public Works

Study Details: Problem Statement

NBS BARRIERS

Many urban sites are not suitable for NBS because of poor soil conditions.

HIGH COST

Conventional stormwater management is expensive.

INNOVATIVE SOLUTIONS

Soil Profile Rebuilding is a cost-effective technique to rehabilitate compacted urban soil on site. It has been adopted in Arlington, VA's stormwater requirements for land disturbing activities.

Study Details: Objectives and Outcomes

Is urban soil rehabilitation an effective means to expand opportunities for nature-based solutions for stormwater management in Los Angeles County?

1. Stormwater Impact

Analyze comprehensive site data demonstrating level of success at increasing permeability rates

2. Demonstration Sites

Establish three proposed demonstration sites in three different land use types: parks, streets, and schools

3. Evaluation

Evaluate the effectiveness of soil profile rebuilding to enable NBS for stormwater management in Los Angeles County

Study Details: Tasks

Background Research and Project Setup

- Comprehensive literature review
- Project site installation

Data Collection and Modeling

- Field experiment and *in situ* data collection
- Laboratory analysis and measurements
- Computer modeling with HYDRUS

Monitoring, Reporting and Dissemination

- Recommendations for Los Angeles County
- Data analysis reports
- Technical presentations to stakeholders

Study Details: Regional Collaboration

- LAUSD MOU
- California Ocean Protection Council $2.3M for Wilmington Middle School and Community Green Infrastructure Project
- LA County Public Works Green Streets Project
- Dominguez Channel Watershed Management Group,
- Manhattan Beach EWMP,
- Hawthorne EWMP,
- Rancho Palos Verdes EWMP, and
- Stormwater Capture Master Plan

Cost & Schedule

Year	Description	Cost	Completion Date
1	Background Research and Project Setup	$664,667	Y1
2	Data Collection and Modeling	$166,566	Y1-Y3
3	Monitoring, Reporting and Dissemination	$166,565	Y2-Y3
TOTAL		**$997,798**	

Funding Request

WASC	Year 1	Year 2	Year 3	Year 4	Year 5
CSMB					
LLAR					
LSGR					
NSMB					
RH					
SCR					
SSMB	$664,667	$166,566	$166,565		
ULAR					
USGR					
TOTAL	**$651,958**	**$291,421**	**$166,565**		

Summary of Benefits

The Rebuilding Soils for Effective Nature-based Solutions Scientific Study will:

- Improve water quality
- Increase water supply
- Enhance community investments in NBS

Questions?

Backup Slides

Organizational Chart and Responsibilities

University of California Riverside

- Technical Lead
- Manage Soil Characterization Efforts
- Oversee Soil Rehabilitation Process
- Soil Monitoring
- Reporting

TreePeople

- Project Management
- Study Oversight
- Community Engagement
- Coordination and Reporting

University British Columbia

- Soil Science Consulting and Review

CAMP

- Experiment Installation
- Site Maintenance and Monitoring
- Research support

Community Garden Stormwater Capture Investigation

Scientific Studies Program

Fiscal Year 2022-2023

South Santa Monica Bay Watershed

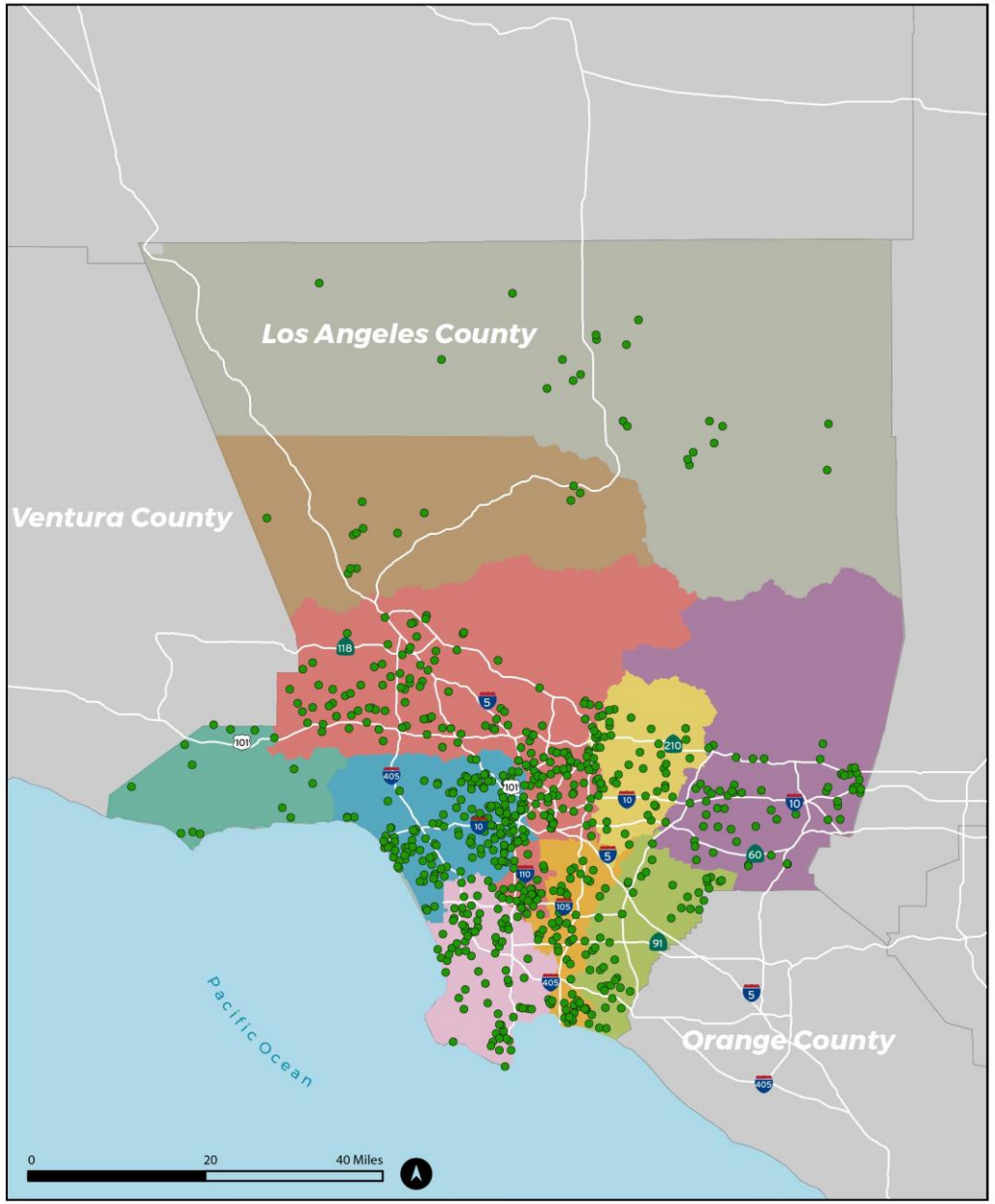
Los Angeles Community Garden Council

Diana Campos Jimenez, Juan Diaz-Carreras

About Us!

- A 501(c)3 non-profit organization founded in 1998
- Our mission is to strengthen communities by building and supporting community gardens where every person in Los Angeles County can grow fresh food in their neighborhood
- Manage 40+ community gardens
- Offer workshops, gardening advice, and community organizing
- Advocate for accessibility to affordable, healthy food

SCW and Scientific Study Program Goals



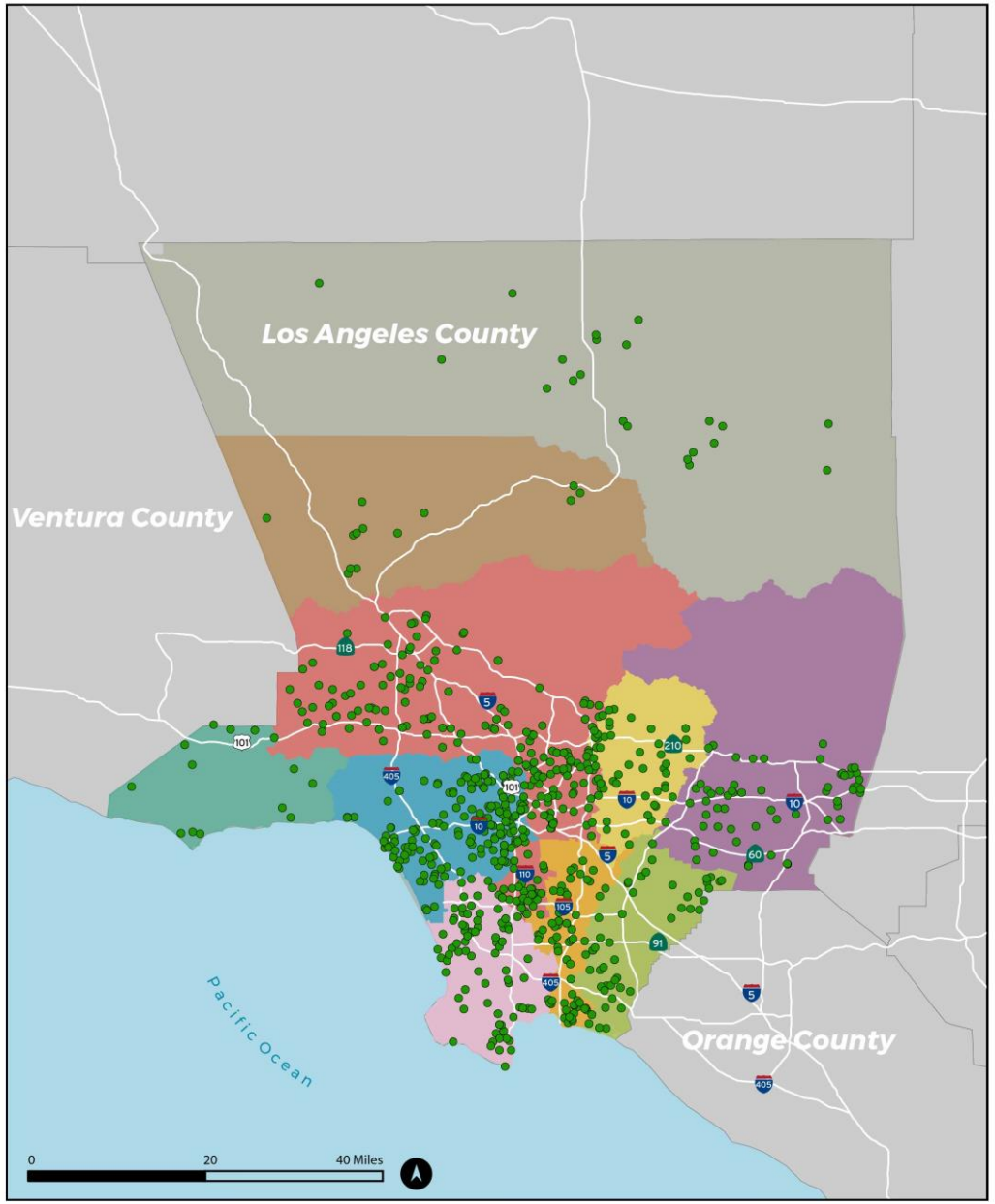
- The purpose of the Scientific Studies Program is to provide funding for scientific and technical activities related to Stormwater and Urban Runoff capture and pollution reduction.
- The study will develop knowledge of the ability of community gardens to advance SCWP goals.

Project Overview

Can community gardens function as stormwater capture facilities? This study will investigate community gardens as a land use, identify site characteristics (i.e. land ownership, infiltration potential, etc.) to determine if the land use has the potential to contribute towards SCW Program goals.

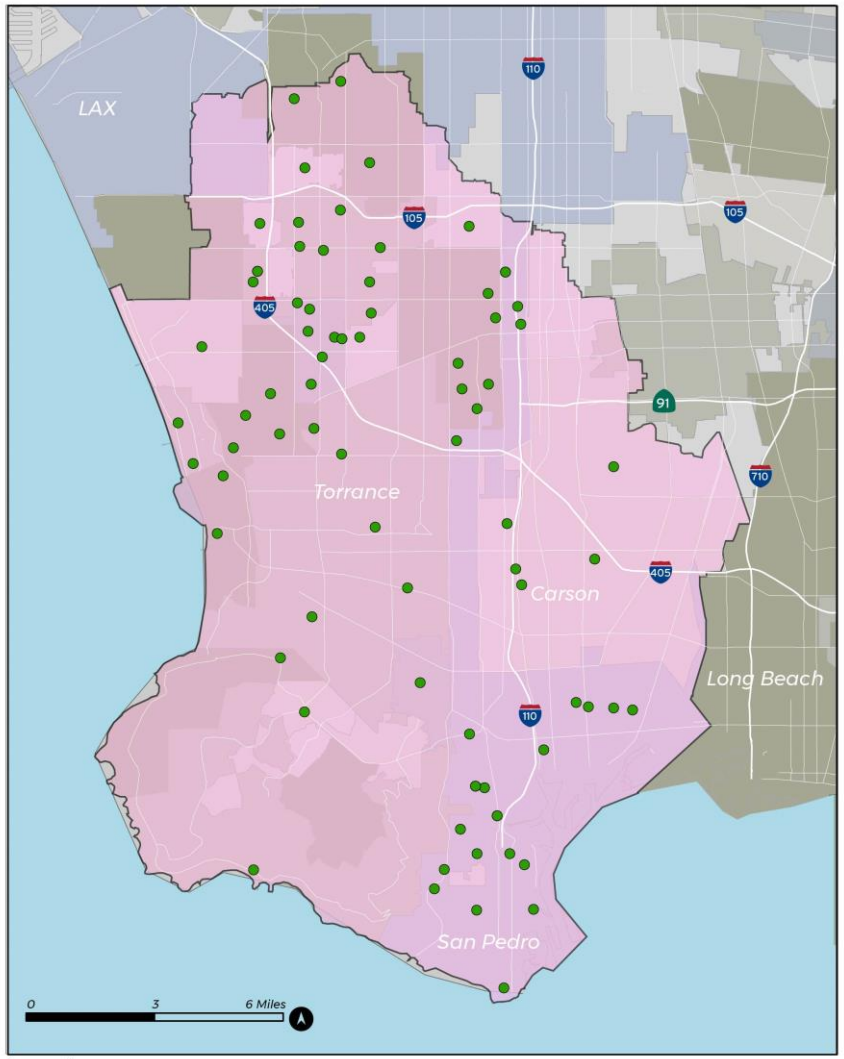
- Primary Objective: Identify conditions under which Community Garden locations have potential for stormwater capture.
- Secondary Objectives: Engage through direct dialog with gardeners to understand their potential needs. Identify 3 locations that can serve as templates for planning purposes.
- Project Status: Planning
- Total Funding Requested: $2,647,990 total/ $378,285 per watershed.

Project Location



- Almost 800 Community Gardens across LA County
- Many are managed by community groups
- Community gardens serve diverse communities in the County

Project Location



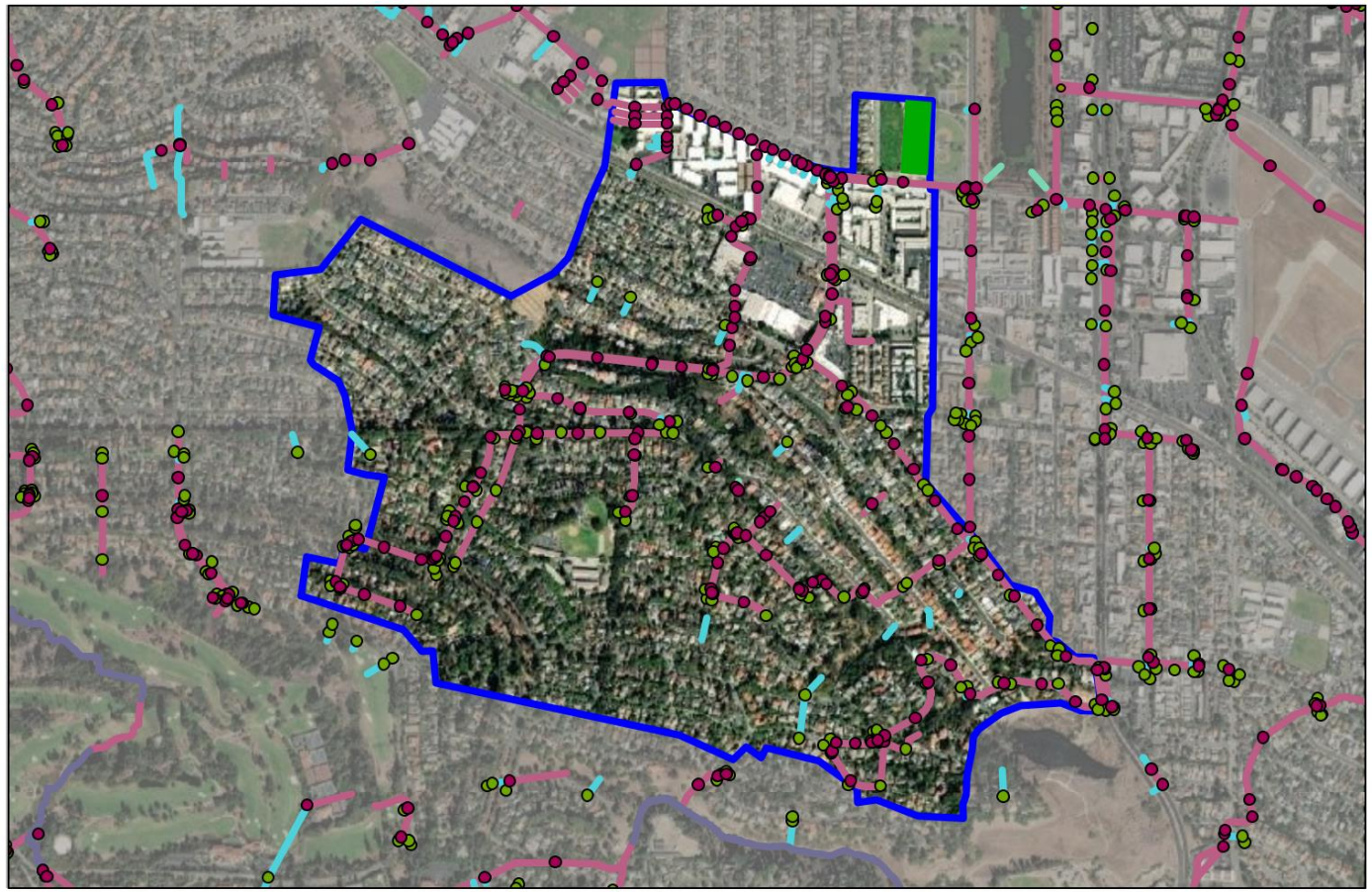
Legend
Community Gardens
South Santa Monica Bay (78)

South Santa Monica Bay Watershed

- 78 community gardens in the watershed

- Torrance Community Garden
  - Approximately 2.6 acres
  - Can gardens downstream of urban areas be redesigned to collect offsite “run-on” from these areas to provide pollutant reduction benefits to municipalities?

Project Location



Legend

- Torrance Community Garden (2.61 acres)
- Watershed Area (468 acres)

Utilities

- Maintenance Hole
- Catch Basin
- Gravity Main
- Lateral Line
- Open Channel
- Natural Drainage

- Example Community Garden with Upstream Tributary Area
- Drainage area is 468 acres to the community garden

Project Background

- Primary Objective: Identify conditions under which Community Garden locations have potential for stormwater capture.
- The Community Garden Stormwater Capture Scientific Study will propose and implement a methodology to compile and evaluate community garden sites to see if compatible with SCWP goals.

Cost & Schedule

Schedule Milestone Table	
Milestone Name	Completion Date
Database of Existing Community Gardens	01/03/2022
Develop Screening Criteria	03/01/2022
Preliminary Investigation	05/02/2022
Site Reconnaissance and Outreach	08/01/2022
Concept Reports and Fact Sheet	10/14/2022
SCW Program Technical Resources Funding Application	11/30/2022

Funding Request

Funding Requested Per Year Per Watershed		
Funding Request Year	Watershed Area	Amount for Year
Year 1	Central Santa Monica Bay	$ 189,142.00
Year 1	Lower Los Angeles River	$ 189,142.00
Year 1	Lower San Gabriel River	$ 189,142.00
Year 1	Rio Hondo	$ 189,142.00
Year 1	South Santa Monica Bay	$ 189,142.00
Year 1	Upper Los Angeles River	$ 189,144.00
Year 1	Upper San Gabriel River	$ 189,142.00
Total Year 1		$ 1,323,996.00
Year 2	Central Santa Monica Bay	$ 189,142.00
Year 2	Lower Los Angeles River	$ 189,142.00
Year 2	Lower San Gabriel River	$ 189,142.00
Year 2	Rio Hondo	$ 189,142.00
Year 2	South Santa Monica Bay	$ 189,142.00
Year 2	Upper Los Angeles River	$ 189,142.00
Year 2	Upper San Gabriel River	$ 189,142.00
Total Year 2		$ 1,323,994.00
Total Funding		$ 2,647,990.00

Project Benefits

Identify under which conditions community gardens can function as stormwater capture facilities.

- Identify conditions under which Community Garden locations have potential for stormwater capture within the Watershed which will benefit WASC member agencies.
- Engage through direct dialog with gardeners to understand their potential needs.
- Identify 3 locations that can serve as templates for planning purposes.

Questions?