

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



Thursday, October 21, 2021
10:00am - 12:00pm
WebEx Meeting

Committee Members Present:

Mark Beltran* (LACFCD)
Art Castro* (LADWP)
Sheila Brice (LA Sanitation)
Rita Kampalath (LA County CSO) – Vice Chair
Gloria Walton (The Solutions Project/SCOPE)
Melanie Rivera* (LA Waterkeeper)
Josette Descalzo (Beverly Hills/West Hollywood)
Lauren Amimoto (Inglewood)
Susie Santilena (Los Angeles) – Chair
Curtis Castle (Santa Monica)
Rafael Prieto (Los Angeles)
Mikaela Randolph (Watershed Coordinator - Heal the Bay)
Michelle Struthers (Watershed Coordinator - S. Groner Associates)

*Committee Member Alternate

Committee Members Not Present:

E.J. Caldwell (West Basin MWD)
Cathie Santo Domingo (LADRP)
Roberto Perez (Los Angeles)
Jacob Lipa (Lipa Consulting Company)

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

1. Welcome and Introductions

Susie Santilena, Chair of the Central Santa Monica Bay WASC, welcomed Committee Members and called the meeting to order.

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

2. Approval of Meeting Minutes from September 16th, 2021

The District provided a copy of the meeting minutes from the previous meeting. Motion to approve the meeting minutes by Member Walton, seconded by Member Descalzo. The committee approved the September 16th, 2021 meeting minutes (approved, see vote tracking sheet).

3. Committee Member and District Updates

There were no committee member updates.

District Staff provided an update, noting:

- The District has initiated the process of sending Fund Transfer Agreements. Addendums for projects that were approved for funding in Year 1 have been sent and Fund Transfer Agreements

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



for projects approved in the Fiscal Year 2021-22 Stormwater Investment Plan will be distributed soon.

- The Scoring Committee has started to score Infrastructure Program (IP) projects. Four IP projects were submitted to CSMB. The Ladera Heights project was scored and passed; the rest will be scored at the November 17 Scoring Committee meeting.
- On October 7, the Regional Oversight Committee (ROC) received an implementation update presentation from District staff regarding the progress of the SCWP. The update was well-received. The slides are available on the SCWP website, under the ROC page.
- Regional Program project proponents are required to submit quarterly and annual reports. The District has provided comments to the proponents so they can resubmit their quarterly reports. The next round of quarterly reports are due November 15.
- Current guidance from the Board of Supervisors and Assembly Bill 361 is for WASC meetings to continue virtually.

4. Watershed Coordinator Updates

Watershed Coordinators (Coordinators) Michelle Struthers and Mikaela Randolph provided an update on the implementation of the Stakeholder Outreach and Engagement Plan (SOEP), noting:

- A bilingual community needs assessment survey was launched in September. The Watershed Coordinators have been collaborating with WaterTalks to manage the data.
- A quarterly report will be submitted to the WASC in November.
- Coordinators have been giving presentations on the SCWP and Technical Resources Program for potential project applicants.
- A press release is in the works with the District to publicize FY 22/23 call for projects.
- Coordinators have been meeting with project teams and stakeholders listed in the SOEP.
- Bilingual outreach materials were developed, including a bilingual tabling set-up.
- Outreach events (Tabling) at the Natural History Museum are scheduled for November and December.
- Funding opportunities will be compiled in the quarterly report.
- A database of funded projects with projected needs is being developed.

Chair Santilena thanked the Coordinators for the presentation.

Member Descalzo asked the Coordinators whether they have reached out to the LA Community Garden Council. Coordinator Struthers confirmed that they have had two meetings with the LA Community Garden Council, regarding the scientific studies program and suggested project concepts.

Chair Santilena asked if there will be more targeted community needs assessment surveys specific to projects. Coordinator Struthers responded that the purpose of the survey is to gauge the community's general needs; the survey can be adapted to specific projects, but the mandate the Coordinators are working under aims for a regional study, so they won't be targeting specific communities. Coordinator Struthers noted that they will follow up with Chair Santilena.

5. Public Comment Period

There were no public comments.

6. Discussion

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



a) **Ex Parte Communication Disclosure**

Chair Santilena moved this to after Agenda Item 7 to accommodate a project presenter with a time constraint.

b) **Scientific Study Program (SS) Presentations**

i. Regional Pathogen Reduction Study Gateway Water Management Authority

Presentation by Richard Watson of Richard Watson and Associates (see Attached: Project Presentations). This study aims to use the latest available science to measure water-borne pathogens across watersheds. It will help identify key sources of human health risk and develop cost-effective protective strategies.

Member Descalzo asked whether the study will be able to identify where the pathogens are coming from and if it will provide recommendations for appropriate BMPs to address them. Watson noted that there are four markers that will be studied. Forensic monitoring will be used to identify pathogen origins. When the study is complete, Watson expects it will.

Member Descalzo asked whether Watson believes there needs to be a continued study after the study. Watson said a continued regional study is not anticipated, but a follow-up study for specific locations may be possible; follow-up studies would depend on the State Water Board.

Member Kampalath asked whether there were people committed to leading the study. Watson reported that communications were established with academics and scientists. If selected for funding, Gateway Water Management Authority will receive the funding for this study and will initiate a procurement process using their policies to select a consultant to complete the work. Those involved in the surfer health study and Southern California Coastal Water Research Project are expected to be involved in the study as well.

ii. Community-Centered Optimization of Nature-Based BMPs Starting with the Gaffey Nature Center Facility

Presentation by Dr. Shahriar Eftekhazadeh of SEITec (see Attached: Project Presentations). This Study aims to use the Gaffey Nature Center as a laboratory to develop optimization guidelines for nature-based BMPs in LA County.

Member Descalzo asked whether the study will investigate plant life cycle and pollutant reduction. Dr. Eftekhazadeh responded that the study will investigate a range of parameters for plants and water quality. Member Descalzo asked whether the study will investigate life cycle of the soil, given that the soil will work as a filter. Dr. Eftekhazadeh noted that the frequency or enhancements needed for the soil media as a filter will be investigated.

Member Amimoto asked how the sites would be chosen or if they have already been selected. Dr. Eftekhazadeh noted that specific questions will help guide the selection of the sites and mentioned that Deborah Deets, architect from LA Sanitation & Environment, has a breadth of knowledge regarding potential county sites. Chair Santilena asked for clarification on how the sites are related to the project. Dr. Eftekhazadeh noted that the sites are what will be investigated at the Gaffey Center.

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



Member Kampalath asked if the plots are experimental plots or BMPs. Dr. Eftekharzadeh responded that there is a central bioswale with surrounding experimental plots that can be used to control and experiment with specific BMP parameters.

Member Rivera asked if there will be other consultants involved for the plant varieties chosen for the project. Dr. Eftekharzadeh noted that the study will involve reaching out to scientific communities, city organizations, and O&M staff from LASAN for involvement.

Chair Santilena asked for the minimum number of WASCs that would be required to participate. Dr. Eftekharzadeh said a successful study will require all WASCs to participate, to ensure the study has a large enough budget to produce the deliverables.

iii. Microplastics in LA County Stormwater

Presentation by Dr. Andrew Gray of University of California, Riverside (see Attached: Project Presentations). The study proposes to monitor and model microplastics in the stormflow of four stream channels in partnership with Los Angeles County Public Works.

Member Kampalath asked whether the study will be able to track sources of microplastics and whether the study will observe the adsorption of pollutants aside from microplastics. Dr. Gray responded that potential sources have been researched and documented in the study, but diagnosis can be complicated for some sources and more monitoring would be required beyond the study. The study has not incorporated an investigation of adsorbed contaminants into the scope because the different methodologies required to study both would affect one another.

iv. Community Garden Stormwater Capture Investigation Los Angeles Community Garden Council

Presentation by Diana Campos Jimenez of Los Angeles Community Garden Council and Juan Diaz-Carreras of WSP USA, Inc (see Attached: Project Presentations). Community gardens can function as stormwater capture facilities. This study will investigate opportunities including conducting outreach.

There were no questions from the Committee for this presenter.

7. Public Comment Period

Dr. Eftekharzadeh asked Diaz-Carreras whether there are concerns of health risks posed by potential contaminant build-up in the food grown in the community garden. Diaz-Carreras responded that the study would investigate how the community gardens can help the SCW program achieve its goals. The project developers are aware of the garden's intended use as a food source and will investigate potential health concerns with growing food with stormwater used as irrigation.

Deborah Deets voiced a concern that one of the goals of SCWP has not been addressed thus far—ensuring the safety of the water consumed. The Gaffey Center project has the potential to allow community members the opportunity to investigate the safety of their water for themselves. Deets expressed support for the Gaffey Center Project.

6. a) Ex Parte Communication Disclosures – moved from Agenda Item 6.a

Chair Santilena disclosed that they were CC'd on emails regarding the Gaffey Center projects.

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



8. Voting Items

There were no voting items.

9. Items for next agenda

- a) Presentations for Technical Resources Program (1)
- b) Presentations for Infrastructure Program (4)

District Staff noted that a one-page summary of the SCCWRP's review of the scientific study will be available in February. Chair Santilena requested a copy for the WASC.

Mike Antos (Stantec) pointed out an opportunity for the Disadvantaged Community Involvement Program (DACIP) to provide a presentation for the WASC about the Strengths & Needs Assessment completed for this and other watershed areas in the County. Chair Santilena asked District staff to queue up this opportunity for after all the projects had been presented for the current program year.

10. Adjournment

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

Next Meeting:

Thursday, November 18, 2021
10:00 AM – 12:00 PM
See SCW website for meeting details

CENTRAL SANTA MONICA BAY WASC MEETING - October 21, 2021

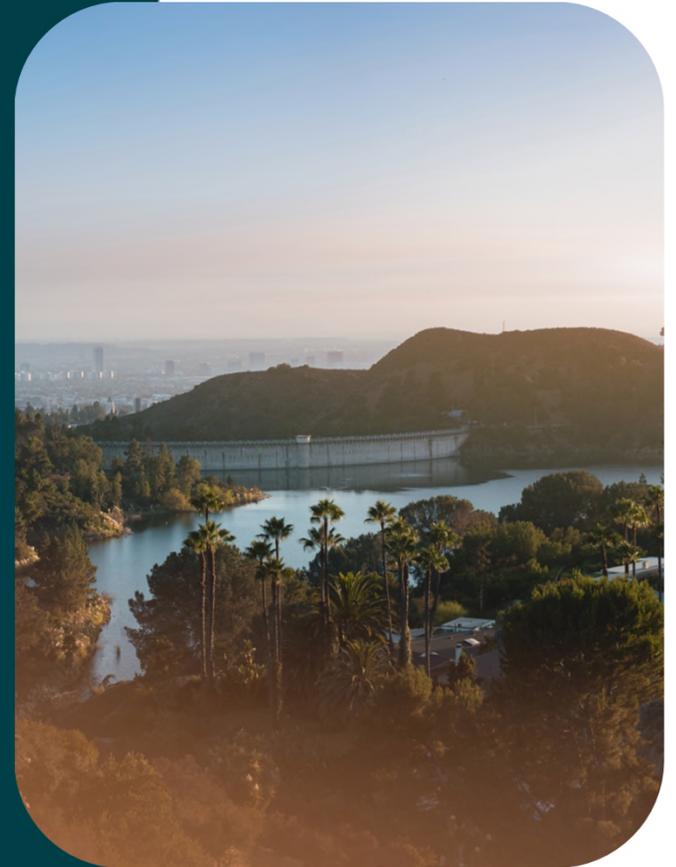
		Quorum Present				Items
Member Type	Organization	Member	Voting?	Alternate	Voting?	9/16/21 Meeting Minutes
Agency	LACFCD	Cung Nguyen		Mark Beltran	x	A
Agency	West Basin MWD	E.J. Caldwell		Alex Heide		
Agency	LA Water & Power	Delon Kwan		Art Castro	x	A
Agency	LA Sanitation District	Sheila Brice	x	Michael Scaduto		Y
Agency	LA Recreation & Parks	Cathie Santo Domingo		Darryl Ford		
Community Stakeholder	LAC Chief Sustainability Office	Rita Kampalath	x	Gary Gero		Y
Community Stakeholder	Lipa Consulting Company / Business Sector	Jacob Lipa		Alysen Weiland		
Community Stakeholder	The Solutions Project / SCOPE	Gloria Walton	x	Gloria Medina		Y
Community Stakeholder	LA Waterkeeper	Bruce Reznik		Melanie Rivera	x	Y
Community Stakeholder	VACANT					
Municipal Members	Beverly Hills / West Hollywood	Josette Descalzo	x	Hany Demitri		Y
Municipal Members	Inglewood	Lauren Amimoto	x			A
Municipal Members	Los Angeles	Roberto Perez		Max Podemski		
Municipal Members	Los Angeles	Rafael Prieto	x			
Municipal Members	Los Angeles	Susie Santilena	x	Rebecca Rasmussen		Y
Municipal Members	LAC Public Works	Bruce Hamamoto		Geremew Amenu	x	
Municipal Members	Santa Monica	Curtis Castle	x	George Rodriguez		Y
Watershed Coordinator	Heal the Bay	Mikaela Randolph	x			N/A
Watershed Coordinator	S. Groner Associates	Michelle Struthers	x			N/A
Total Non-Vacant Seats		16			Yay (Y)	7
Total Voting Members Present		12			Nay (N)	0
Agency		3			Abstain (A)	3
Community Stakeholder		3			Total	10
Municipal Members		6				Approved



CENTRAL SANTA MONICA BAY

QUARTERLY UPDATE

-Watershed Coordinators Presentation-





TODAY'S AGENDA



UPDATES ON SOEP IMPLEMENTATION

BY FOCUS AREA



COMING UP..



YOUR WATERSHED COORDINATORS



— MIKAELA
RANDOLPH
Heal the Bay



Senior Watershed
Specialist, Central Santa
Monica Bay

— MICHELLE
STRUTHERS
SGA Marketing



Watershed coordinator
public health/research



OUR
FOCUS
AREAS



1

**UNDERSTAND COMMUNITY NEEDS
AND PRIORITIES IN WATERSHED**

2

SOLICIT NEW PROJECTS

3

SUPPORT CURRENT PROJECTS

4

**RAISE PUBLIC AWARENESS ABOUT
SCW**

5

SUPPORT WASCS



UNDERSTANDING COMMUNITY NEEDS

LAUNCH A BILINGUAL COMMUNITY NEEDS ASSESSMENT SURVEY

- *Launched in September!*
- *9 questions total*
- *Gathers geospatial data to allow for Watershed- and neighborhood-specific sorting*
- *English Survey Link: [here](#)*
- *Spanish Survey Link: [here](#)*
- *Also providing hard copy versions at events*



SAFE CLEAN WATER PROGRAM

Encuesta Comunitaria del Programa de Agua Limpia y Segura

Gracias por participar en nuestra breve encuesta. Los comentarios de miembros de la comunidad como usted nos ayudan a asegurarnos de que estamos priorizando los proyectos y los problemas que más importan a su comunidad. Esta encuesta debería tardar entre 3 y 5 minutos en completarse.

Algunas de estas preguntas están adaptadas de la Encuesta WaterTalks (watertalks.csusb.edu).



¿Qué problemas relacionados con el agua son de mayor preocupación en su comunidad? Elija hasta 3. *

- Sequía
- Dependencia del agua importada
- Inundaciones
- Basura, contaminación industrial y otra contaminación en calles y vías fluviales
- Contaminación del océano
- Otro

¿Qué desea ver más en su comunidad? Elija hasta 3. *

- Resiliencia ante la sequía
- Protección contra inundaciones
- Playas y ríos más limpios
- Oportunidades recreativas en el Río de LA
- Árboles



SPANISH SURVEY SNAPSHOT

Make Ballona Creek path more green. Trees for shade please.

Flooding at the intersection of Camarillo St and Vineland Ave.

What is one **outdoor area** in your community that is in need of beautification or improvement? This could be anything from an abandoned lot, a local park that could be improved, or a street corner prone to flooding. Please be specific about the location. (Optional)

Empty areas all along the river esp. around South Gate.

We have 3 bridges that need bike paths and connecting on the east bank of the LA River for waking.

Continue the park along Southern Ave in South Gate, from California St to the LA River.



UNDERSTANDING COMMUNITY NEEDS

1:1 MEETINGS WITH INTERESTED PARTIES

- *6 meetings to-date:*
 - *LA County Parks and Recreation*
 - *10x10 Initiative*
 - *Friends of Ballona*
 - *Natural History Museums of LA County*
 - *LA Community Garden Council*
 - *Kounkuey Designs*

SOLICIT NEW PROJECTS

GIVE PRESENTATIONS ON SCWP AND THE TRP

- SGA's TRP presentation was approved for regional use by District

PRESS RELEASE TO PUBLICIZE FY22/23 CALL FOR PROJECTS

- Developed; Currently under review by District





SUPPORT CURRENT PROJECTS

1:1 Meetings with Project Teams

- *California Greenworks - Blackwelder Tract*
- *LA Community Garden Council*



SUPPORT CURRENT PROJECTS

CATALOG AND SHARE COST-SHARING OPPORTUNITIES

- *Updated list of external funding opportunities will be attached to Quarterly Report*
- *Developing database of funded projects with projected needs*



SUPPORT CURRENT PROJECTS

PROVIDE ONGOING COMMUNITY OUTREACH GUIDANCE

- *Contacted project leads for all 9 funded IP projects*
- *Gathering outreach materials developed by projects for potential inclusion at outreach events*

RAISE PUBLIC AWARENESS OF SCWP

DEVELOP BILINGUAL TABLING SET-UP

- *Completed!*
 - *Roll-up banners*
 - *CA poppy seed giveaways*
 - *Table flyer*
 - *Flyer hand-out*
 - *Watershed activity for kids*



OUTREACH MATERIALS

CALIFORNIA POPPY SEEDS
SEMILLAS DE AMAPOLA DE CALIFORNIA
Eschscholzia Californica



Our State Flower
Nuestra Flor Del Estado

**REDUCE YOUR WATER USE TODAY
WITH NATIVE PLANTS!**
¡DISMINUYA HOY SU USO DE AGUA
CON PLANTAS NATIVAS!

PLANTING INSTRUCTIONS:

- Annual
- Full sun
- Plant in fall or early spring
- Seeds do well in dry poor soil

INSTRUCCIONES PARA PLANTAR:

- Anual
- Pleno Sol
- Plantar en otoño y a principios de primavera
- Las semillas crecen bien en suelo seco y pobre

Capturing, cleaning and conserving L.A. County's rainwater.
Captura, limpieza y conservación del agua pluvial del condado de L.A.

GET INVOLVED PARTICIPE
What are your community's water concerns? Take our survey.
¿Qué preocupaciones tiene sobre el agua de su comunidad? Responda nuestra encuesta.

SAFE CLEAN WATER PROGRAM

Learn more: [Más información safecleanwater.org](https://safecleanwater.org)




Net wt. 50mg, Lot D, Packed for 2021 Sell by 06/2022 AMS 5060

WHAT IS THE SAFE CLEAN WATER PROGRAM (MEASURE W)?



A PROGRAM TO MODERNIZE L.A. COUNTY'S 100-YEAR-OLD WATER SYSTEM BY:

REDUCING TRASH AND TOXINS IN OUR WATERS
Every year over 50% of local waterways are classified as having "impaired" water quality.

INCREASING LOCAL WATER SUPPLY THROUGH RAINWATER CAPTURE
We currently import 2/3 of our water.

BUILDING OUR CLIMATE CHANGE RESILIENCY
To protect against future droughts.

CREATING MORE GREEN SPACE & PARKS
52.6% of the County's population lives in a "high" to "very high" park needs area.

EXAMPLE OF PROJECT IN YOUR COMMUNITY:



Urban Orchard

This new park in South Gate will clean captured water for use in a community orchard, educational garden and local wetland habitat.

HOW CAN I GET INVOLVED?



**TAKE 2 MIN SURVEY
ATTEND A PUBLIC MEETING**

<https://linktr.ee/safecleanwater>



WHAT IS THE SAFE CLEAN WATER PROGRAM (MEASURE W)?

¿QUE ES EL PROGRAMA DE AGUA SEGURA Y LIMPIA (INICIATIVA W)?

A program to modernize L.A. County's 100 year-old water system
 Un programa para modernizar el sistema de agua del condado de L.A. que data de hace 100 años

HOW? ¿CÓMO?
 Through the development of stormwater infrastructure projects, the Program aims to:
 A través de desarrollo de proyectos de infraestructura de aguas pluviales, el programa tiene como objetivo:

- Increase local water supply through watershed capture. *Aumentar la capacidad de agua local a través de la captación.*
- Reduce trash and toxins in our waters. *Reducir basura y toxinas en nuestros aguas.*
- Create more green space and parks. *Crear más parques y espacios verdes.*
- Build our climate change resiliency. *Construir nuestra resiliencia al cambio climático.*

WHERE ARE PROJECTS FUNDED ¿DE DÓNDE SE FINANCIAN ESTOS PROYECTOS?

The program is funded by an annual local parcel tax.
 El programa está financiado por un impuesto local de parcelas anual.
 Funding is distributed across L.A. County's 9 watersheds.
 Los fondos están distribuidos entre los 9 cuencas hidrográficas del condado de L.A.

WHAT IS A WATERSHED? ¿QUÉ ES UNA CUENCA HIDROGRÁFICA?

An area of land that drains rainwater into the same body of water, like a river, lake, or the ocean.
 Un área de tierra que drena el agua pluvial hacia un cuerpo de agua común, como un lago, un río o el océano.

LEARN MORE: [MÁS INFORMACIÓN safecleanwaterla.org](http://safecleanwaterla.org)






WHY DO WE NEED TO CAPTURE RAINWATER? ¿POR QUÉ NECESITAMOS CAPTURAR EL AGUA DE LA LLUVIA?

WE LIVE IN A WATER-SCARCE AREA. AS CLIMATE CHANGE CAUSES MORE WEATHER EXTREMES LIKE DROUGHT, WE NEED TO TAKE STEPS TO IMPROVE OUR LOCAL WATER RESOURCES.

Vivimos en un área con escasez de agua. Dado que el cambio climático está provocando más fenómenos meteorológicos extremos como la sequía, debemos tomar medidas para mejorar nuestros recursos de agua locales.

EVERY YEAR IN LA COUNTY: CADA AÑO EN EL CONDADO DE L.A.:

- OVER 50% OF WATER BODIES ARE CLASSIFIED AS HAVING "IMPAIRED" WATER QUALITY**
 MÁS DEL 50% DE LOS CUERPOS DE AGUA ESTÁN CLASIFICADAS COMO DETERIORADAS
- 1.4 MILLION ILLNESSES ARE CAUSED BY POLLUTED WATER**
 1.4 MILLONES DE ENFERMEDADES SON CAUSADAS POR AGUA CONTAMINADA
- 2/3 OF OUR WATER IS IMPORTED**
 2/3 DE NUESTRA AGUA ES IMPORTADA

safecleanwaterla.org





WHAT DO YOU WANT TO SEE MORE OF IN YOUR COMMUNITY? ¿QUÉ DESEA VER MÁS EN SU COMUNIDAD?

What are your community's water concerns? Take our survey. ¿Qué preocupaciones tiene sobre el agua de su comunidad? Responda nuestra encuesta.



DROUGHT RESILIENCE RESILIENCIA ANTE LA SEQUÍA	FLOOD PROTECTION PROTECCIÓN CONTRA INUNDACIONES	CLEANER BEACHES & RIVERS PLAYAS Y RÍOS MÁS LIMPIOS	LA RIVER RECREATION OPPORTUNITIES OPORTUNIDADES RECREATIVAS EN EL RÍO DE LA
TREES ÁRBOLES	COMMUNITY GARDENS JARDINES COMUNITARIOS	GREEN SCHOOLYARDS PÁRQUES DE ESCUELA VERDES	WILDLIFE HABITATS HÁBITATS DE LA FAUNA
BIKE PATHS PISTAS CICLISTAS	PUBLIC RECREATION FACILITIES INSTALACIONES RECREATIVAS PÚBLICAS	WALKING PATHS ZONAS PEATONALES	PARK MAINTENANCE MANTENIMIENTO DE PARQUES



SAFE CLEAN WATER PROGRAM

WHAT IS THE SAFE CLEAN WATER PROGRAM (MEASURE W)?

¿QUÉ ES EL PROGRAMA DE AGUA SEGURA Y LIMPIA (MEDICIÓN W)?

A program to modernize LA County's 100-year-old water system.

Un programa para modernizar el sistema de agua de 100 años de antigüedad de LA que debe ser más segura.

WAYS AND PROJECTS FINANCING

WAYS AND PROJECTS FINANCING TO IMPROVE THE WATER SYSTEMS OF CALIFORNIA.

HOW? ¿CÓMO?

Through the development of innovative infrastructure projects, the Program will:

- Improve local water supply through innovative capture and storage of precipitation.
- Reduce peak and steady in our waters.
- Create new green spaces and parks.
- Build and enhance green infrastructure.

WHAT IS A WATERSHED?

WHAT IS A WATERSHED? A watershed is the area of land that drains water to a common outlet, such as a stream or river. Watersheds are important because they help us understand how water flows and how we can protect it.

safecleanwater.org

SAFE CLEAN WATER PROGRAM

WHY DO WE NEED TO CAPTURE RAINWATER?

¿POR QUÉ NECESITAMOS CAPTURAR EL AGUA DE LA LLEUVA?

WE LIVE IN A **WATER-SCARCE AREA.** AS CLIMATE CHANGE CAUSES MORE WEATHER EXTREMES LIKE DROUGHTS, WE NEED TO TAKE STEPS TO IMPROVE OUR LOCAL WATER RESOURCES.

EVERY YEAR IN LA COUNTY: CADA AÑO EN EL CONDADO DE LA:

- OVER 50% OF WATER BODIES ARE UNDER STRESS DUE TO DROPPING RAINFALL.
- 1.4 MILLION CALIFORNIANS ARE CHOKED BY POLLUTED WATER.
- 2/3 OF CALIFORNIA'S WATER SUPPLY IS PROVIDED BY RIVERS AND RESERVOIRS.

safecleanwater.org

SAFE CLEAN WATER PROGRAM

WHAT DO YOU WANT TO SEE MORE OF IN YOUR COMMUNITY?

¿QUÉ DESEA VER MÁS EN SU COMUNIDAD?

What are your community's water concerns? Take our survey. ¿Qué preocupaciones tiene sobre el agua de su comunidad? Responda nuestro encuesta.

WATER RESILIENCE	FLOOD PROTECTION	CLEANER BEACHES & BAYS	LA WATER RECYCLING INFRASTRUCTURE
TREES	COMMUNITY GARDENS	GREEN SCHOOLS/URBANS	WILDLIFE HABITATS
BIKE PATHS	PUBLIC RECREATION FACILITIES	WALKWAYS	

TAKE 1 MINUTE SURVEY FOR THE CALIFORNIA PUMPY BEARS

WHAT IS A WATERSHED?

WATER RECYCLING

RAISE PUBLIC AWARENESS OF SCWP

OUTREACH AT 4 PUBLIC EVENTS

- *Completed: Coastal Cleanup Day (9/18/21)*
- *Scheduled/Pending:*
 - *Natural History Museum (Nov & Dec)*



Coastal Cleanup Day





Coming Up...

NOVEMBER

Submission of SGA & HtB Quarterly Reports

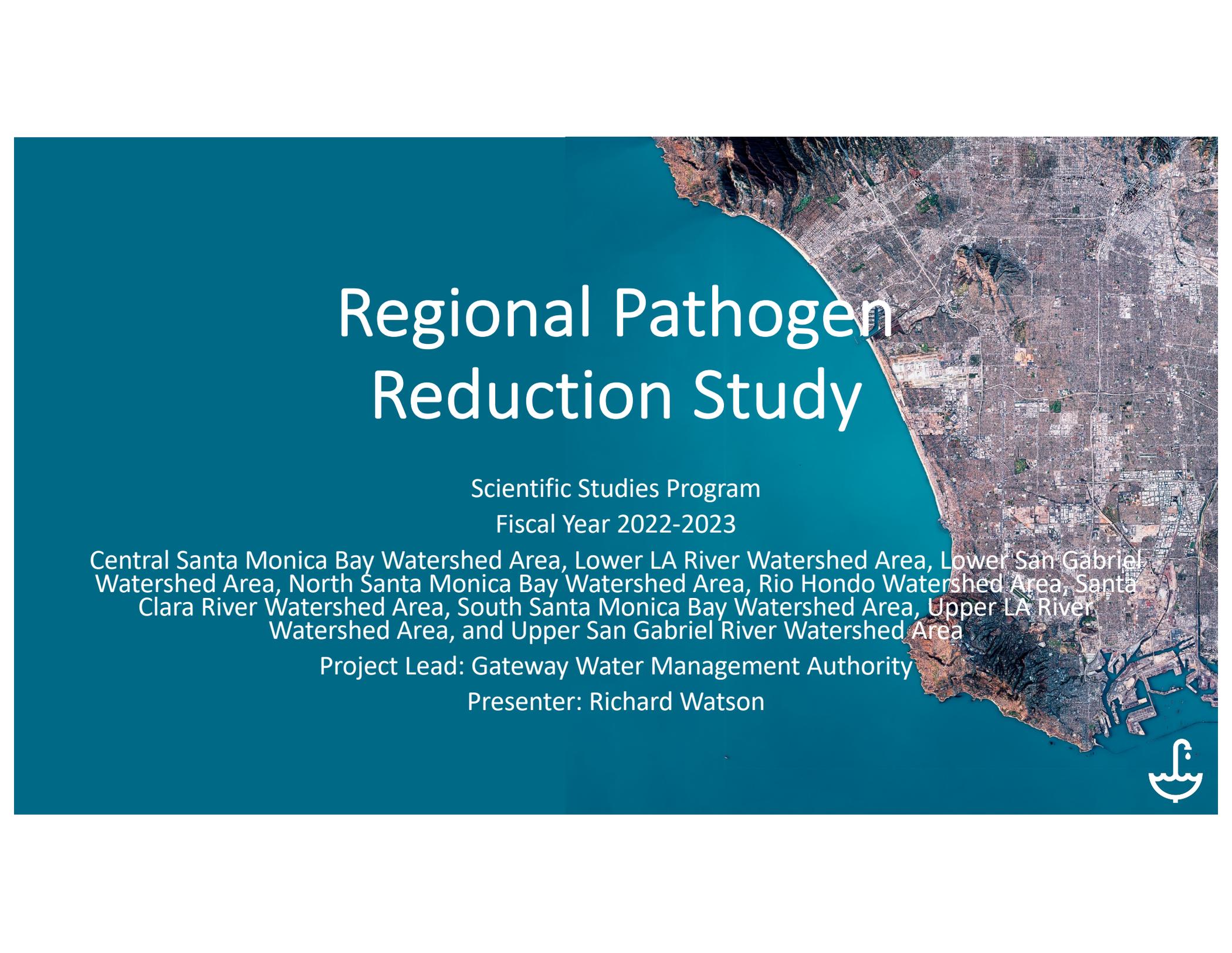
Tabling at Natural History Museum

DECEMBER

Watershed Wide Educational Event (Dec. 7)

Tabling at Natural History Museum





Regional Pathogen Reduction Study

Scientific Studies Program
Fiscal Year 2022-2023

Central Santa Monica Bay Watershed Area, Lower LA River Watershed Area, Lower San Gabriel Watershed Area, North Santa Monica Bay Watershed Area, Rio Hondo Watershed Area, Santa Clara River Watershed Area, South Santa Monica Bay Watershed Area, Upper LA River Watershed Area, and Upper San Gabriel River Watershed Area

Project Lead: Gateway Water Management Authority
Presenter: Richard Watson



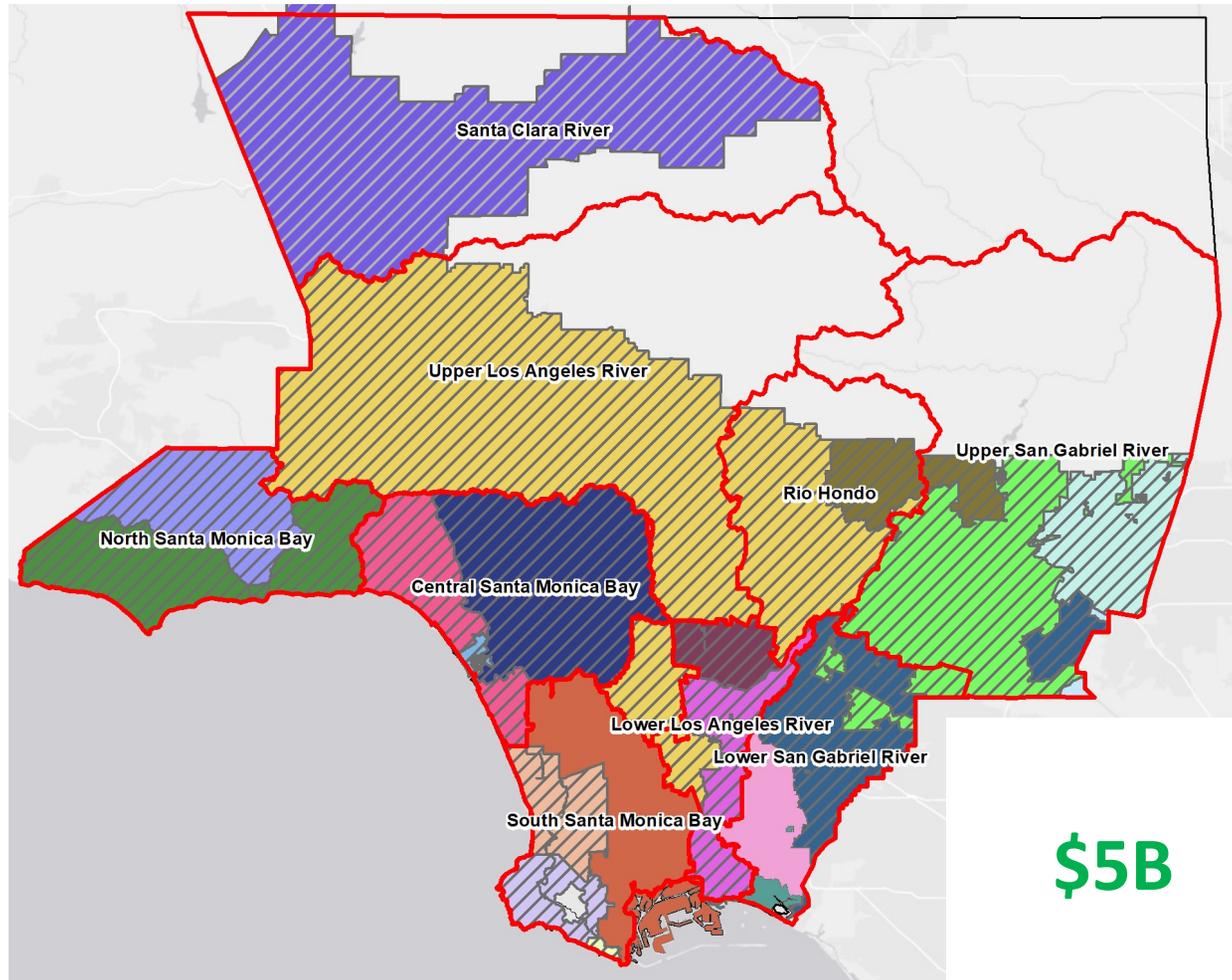
Study Overview

- This Study aims to use the latest available science to measure water-borne pathogens across watersheds. It will help identify key sources of human health risk, and develop cost-effective protective strategies
- Nexus to Stormwater and Urban Runoff Capture and Pollution Reduction
 - Study will facilitate improved targeting of pathogen sources and water to capture and/or treat
 - Study may reduce the level of stormwater capture for bacteria compliance purposes through the identification of non-MS4 sources of risk thereby improving the protection of human health
 - Study will likely lead to partnering with various parties, such as wastewater agencies and homeless services agencies, to address human sources of pathogens.





Study Location





Study Details

Problem Statement:

- Waterborne pathogens represent the most significant potential threat to the health of people recreating in and around the ocean and inland waters of Los Angeles County.
- Current standards are based on FIB (fecal indicator bacteria), which are used as proxies for pathogens.
 - FIB are ubiquitous; a vast network of structural control measures would need to be implemented to provide adequate control – projected cost over \$5 billion.
 - USEPA and academia agree that human sources of pathogens pose the greatest risk
 - Unless high-risk sources are targeted, water capture projects may receive large FIB loads, but miss the highest risk human sources.

(Continued)



Scientific Study Details (Continued)

Methodology:

- Study work plan will be developed through a stakeholder-led process with the input of technical experts, including academics.
 - Stakeholder engagement is at the forefront of the study to ensure that diverse viewpoints are incorporated.
- Study will collect samples from beaches and waterbodies. Samples will be analyzed for traditional bacterial indicators, viruses, and human markers during wet and dry weather.
 - Identify areas with highest risk to support a focus on those areas
 - Identify the sources causing the highest risk to focus on those sources
- Study will assess control measure effectiveness and efficiency
 - Identify the best BMPs to address the sources
 - Support planning, applying municipal funds, requests for SCWP funding, and actions by other parties

(Continued)



Scientific Study Details (Continued)

- *Regional collaboration efforts:*
 - Small Group Initiated Discussions and built a scope for a Safe, Clean Water Regional Program project
 - Presented Approach to E/WMP Groups
 - Discussed with proponents of watershed-specific studies
 - Discussed with Regional Board staff
- Revised study twice to address concerns
 - Clearly focused on human pathogens
 - Clarified that study is a component of overall strategy to protect human health
 - Clarified that implementation continues during the study
 - Recognized that we do not need to wait until the end of the study to take action
 - Reduced first year cost of study



Recent Revisions to Regional Pathogen Summary

- Added North Santa Monica Bay back into study
- Added an illustrative overview in Attachments (for Section 2.3)
- Added a Details Attachment (for Section 2.4)
- Attachments include a fact sheet, a table of potential constituents, and a map of potential monitoring sites
- Clarified that focus is on urbanized areas
- Clarified that monitoring sites would be chosen from MS4 monitoring sites.



Cost & Schedule

Phase	Description	Cost	Schedule
Task 1	Stakeholder Process	\$490,000	7/22 – 6/27
Task 2	Health Risk Assessment	\$5,880,000	7/22 – 9/26
Task 3	Risk Management	\$1,734,600	4/23 – 3/27
Task 4	Application of Study Findings	\$490,000	1/26 – 6/27
TOTAL		\$8,594,600	



Funding Request

WASC	Year 1	Year 2	Year 3	Year 4	Year 5
CSMB	\$47,109.15	\$329,764.06	\$282,654.91	\$307,364.38	\$107,432.50
LLAR	\$33,843.21	\$236,902.50	\$203,059.29	\$220,810.57	\$77,179.51
LSGR	\$44,169.54	\$309,186.78	\$265,017.24	\$288,184.85	\$100,728.71
NSMB	\$4,748.60	\$33,240.22	\$28,491.61	\$30,982.33	10,829.20
RH	\$30,413.67	\$212,895.68	\$182,482.01	\$198,434.45	\$69,358.42
SCR	\$15,866.36	\$111,064.53	\$95,198.17	\$103,520.32	\$36,183.27
SSMB	\$48,654.33	\$340,580.32	\$291,925.99	\$317,445.93	\$110,956.29
ULAR	\$102,094.95	\$714,664.67	\$612,569.72	\$666,120.09	\$232,827.71
USGR	\$49,973.39	\$349,813.71	\$299,840.33	\$326,052.14	\$113,964.40
TOTAL	\$376,873.21	\$2,638,112.47	\$2,261,239.26	\$2,458,915.06	\$859,460.00

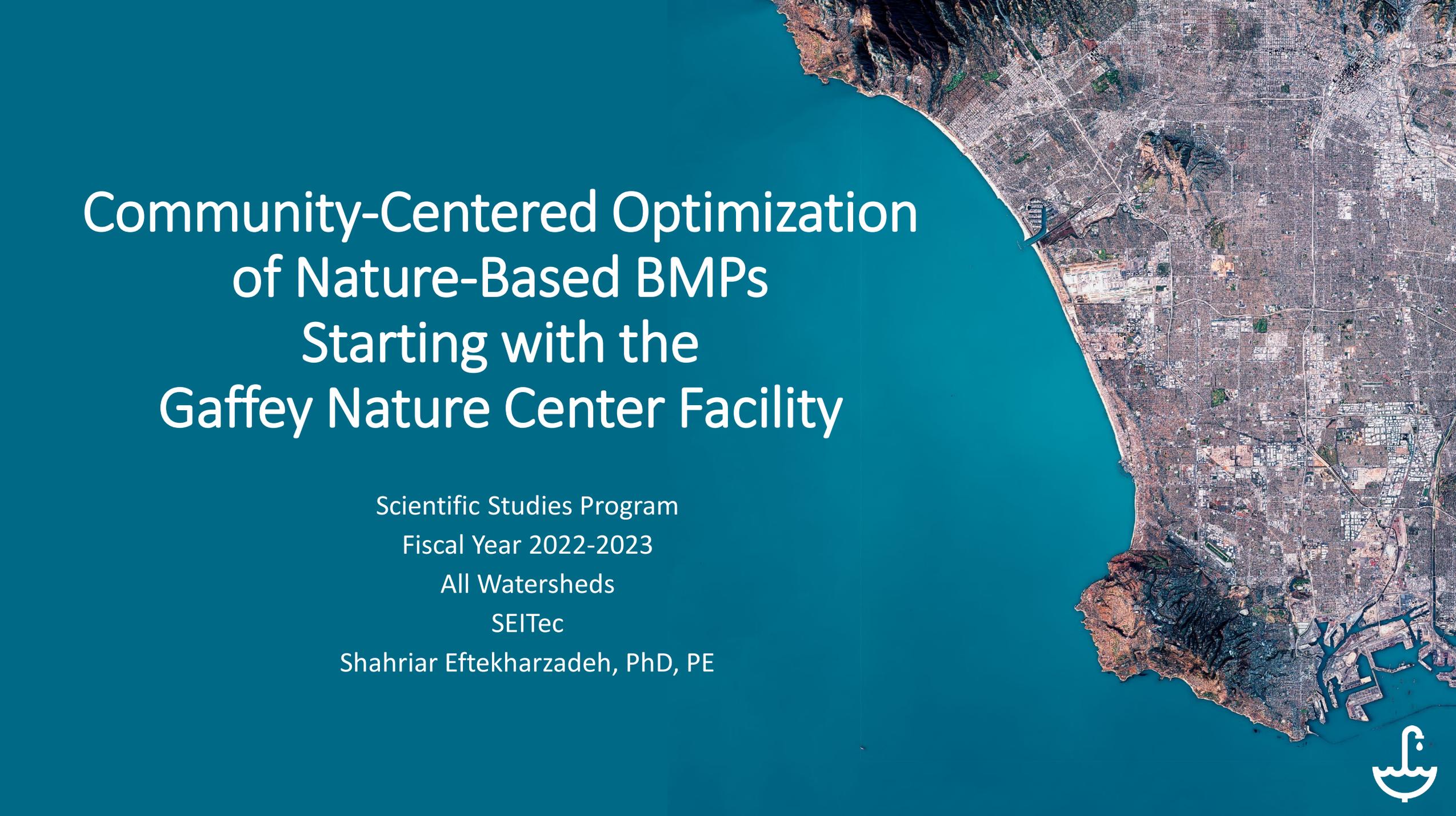


Summary of Benefits

- By developing a better understanding of pathogens present in the region's watersheds, the relative risk to human health they pose, and the effectiveness of various control measures, new or adapted BMPs can be established that improve water quality and reduce human health risks at our beaches and inland waterbodies.
- Short-term: results could be used to protect people from health risks that aren't currently known.
- Long-term: results will enable the targeted placement of BMPs in locations where they can maximize the prevention or treatment of key sources of human pathogens.



Questions?



Community-Centered Optimization of Nature-Based BMPs Starting with the Gaffey Nature Center Facility

Scientific Studies Program

Fiscal Year 2022-2023

All Watersheds

SEITec

Shahriar Eftekharzadeh, PhD, PE



Study Overview

Biofiltration BMP Optimization

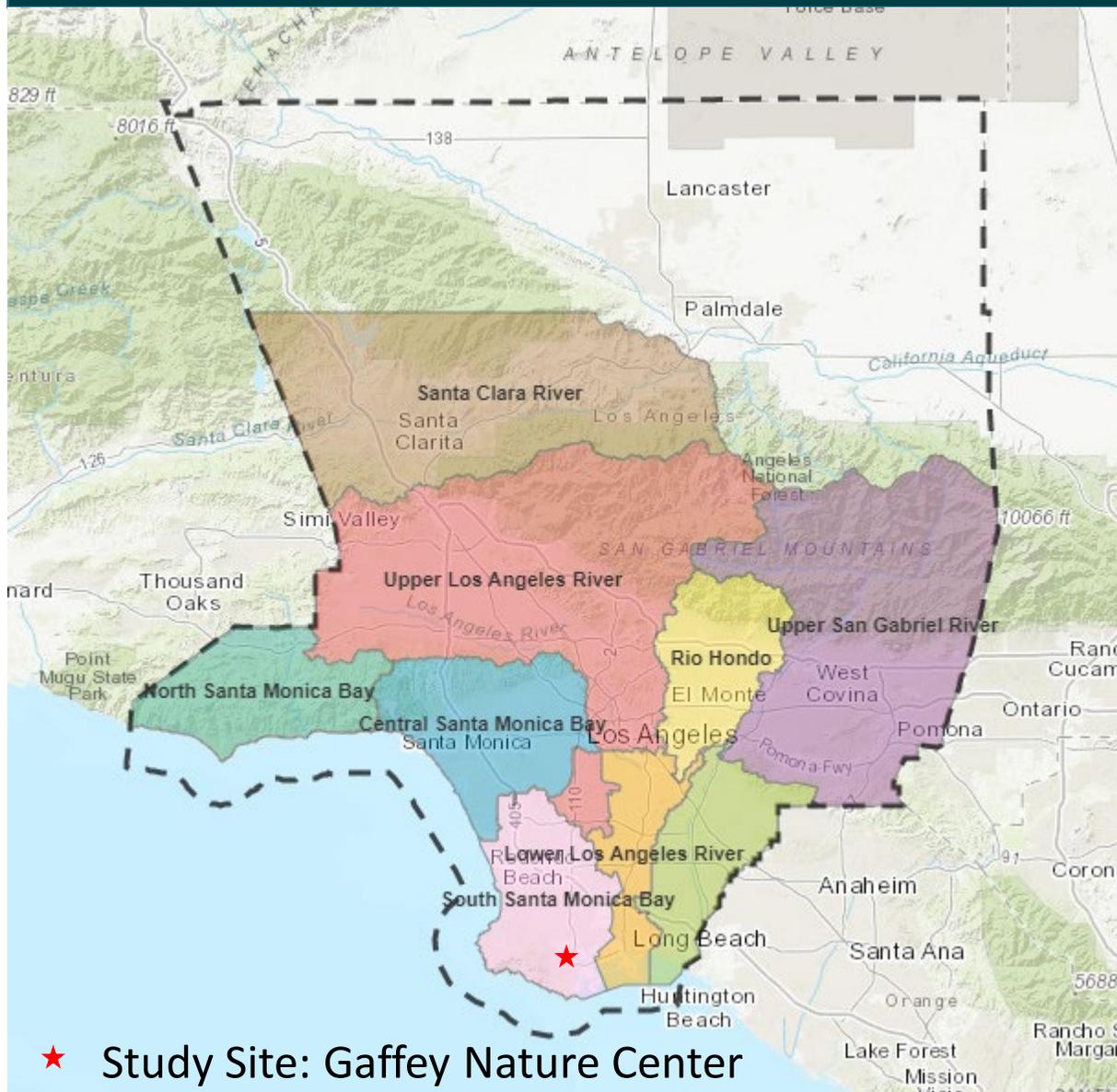
This study aims to optimize:

1. plant varieties and species, and
2. the design, construction, and O&M of nature-based biofiltration BMPs, with special focus on the community.





Study Location



Study Location: The “Gaffey Nature Center” in San Pedro, a purposely built facility to study nature-based stormwater BMPs.

Study Benefits: This study will benefit the implementation of nature-based stormwater BMPs in **ALL watersheds.**



Study Location – The Gaffey Nature Center

- 3.1-acre site at N. Gaffey St. and 110-FWY in San Pedro, CA
- Land leased to LASAN for BMP education and research
- Construction work completed in September 2021

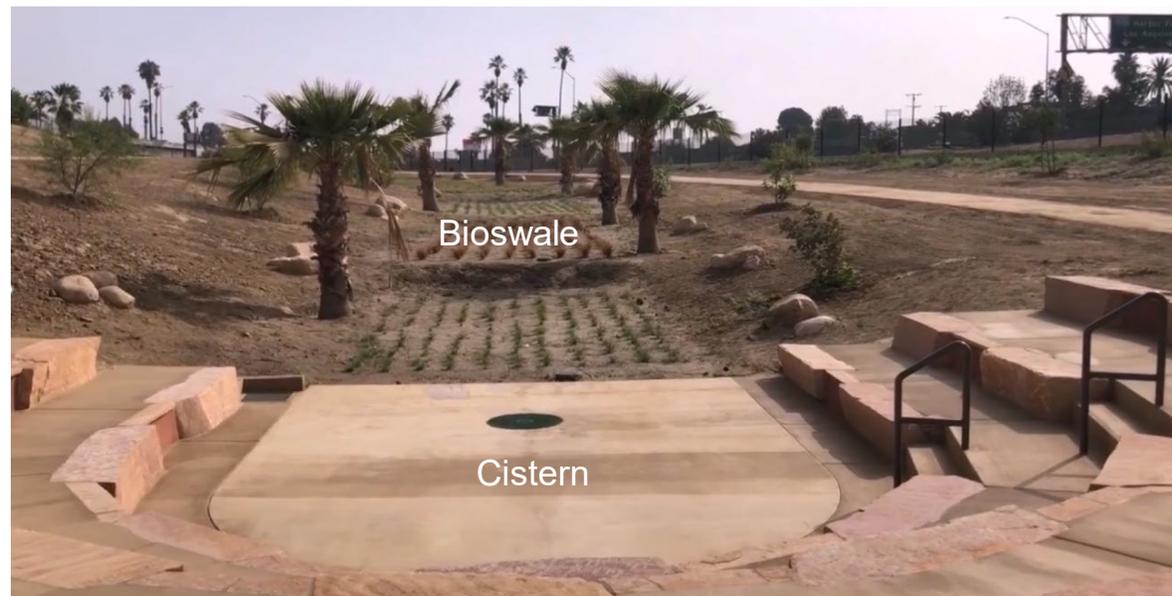




The Gaffey Nature Center

Site incorporates

- City's first vertical cistern, now in several SCW projects
- Central hydroponic bioswale on laser-leveled basins
- Diverse variety of CA-native plants for nature-based BMPs

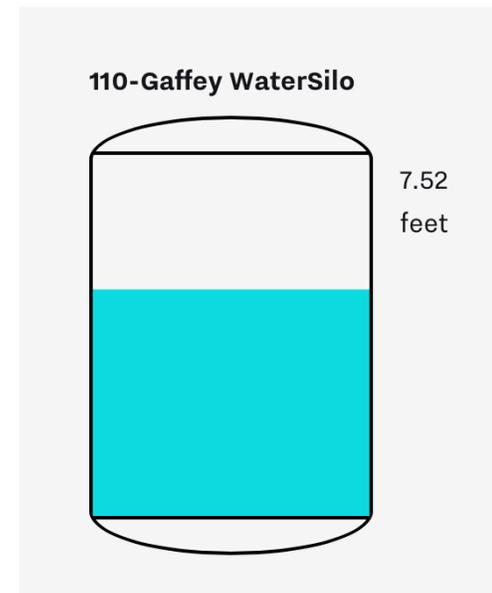




The Gaffey Nature Center

Site incorporates

- Solar powered pumps and recirculation system
- Internet connectivity
- Infrastructure for instrumentation and remote sensing





The Gaffey Nature Center

Site incorporates

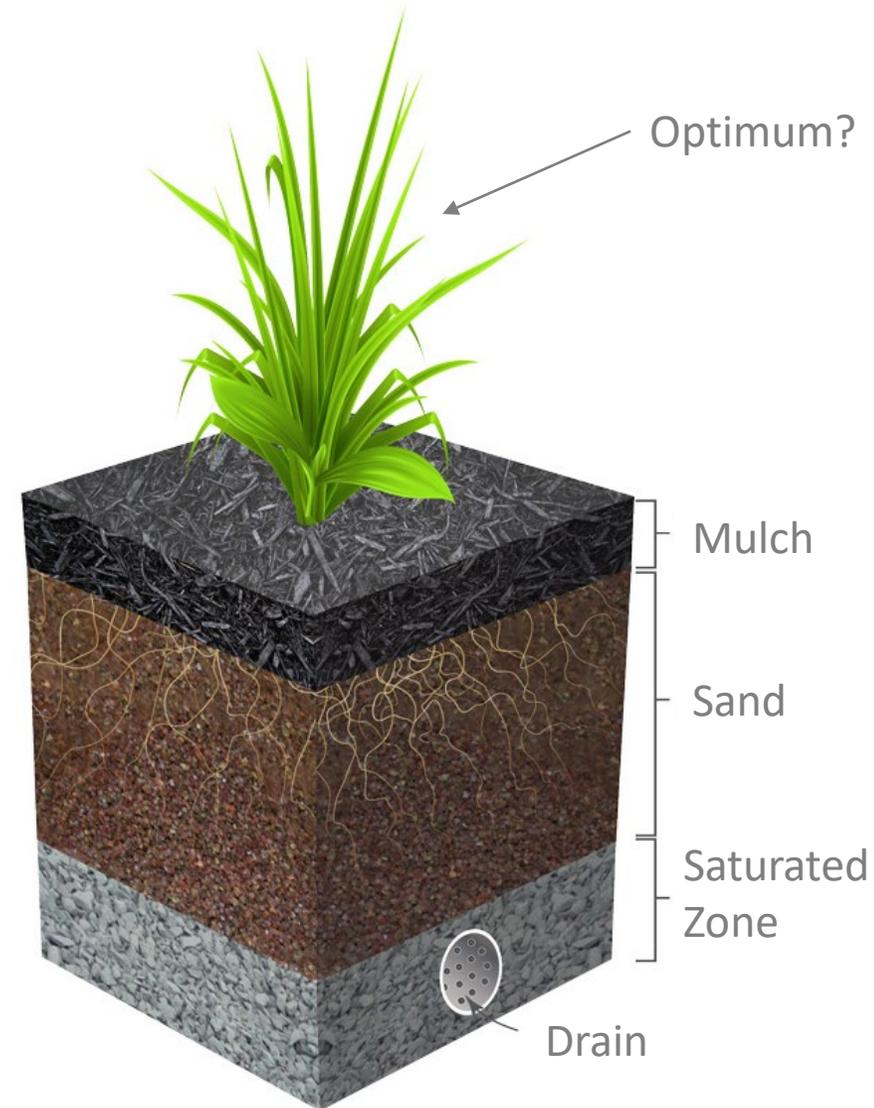
- Outdoor amphitheater and educational signage
- Experimental plots with CA-native BMP grass varieties
- Basic infrastructure for research and public involvement





Problem Statement

- Los Angeles has adopted Biofiltration for nature-based stormwater BMPs.
- The process relies on bio-diverse native species and beneficial-use varieties.
- There is no research on CA-Native species and varieties, with enormous potential.
- Urgently need credible research to guide the planning, design, O&M of biofiltration using CA-native species and varieties.





Problem Statement – Continued

- A key overlooked potential of nature-based BMPs is biomass production, cooling, and air quality improvement.
- Benefits include carbon sequestration, raw materials supply, medicinal use, animal feed, and human consumption.
- Realizing such benefits requires a community-centered approach involving intimate participation and ownership.
- A key requirement is education and training for bioswale development consistent with community interests.





Study Objectives

1. Develop Guidelines and Standard Operating Procedures for optimized design, construction, and O&M of nature-based biofiltration BMPs.
2. Incorporate guidelines in a future revision of the City and County ROW and LID manuals.





Experiment Questions

Q1: What are the optimal plants and planting practices for biofiltration in California?

Q2: What are the BMP optimization variables for maximum efficacy?

Q3: How will community skills, needs, and level of involvement influence optimization?





Study Tasks

Task	Scope
Task 1: Goals & Parameters	<ul style="list-style-type: none">• Identify goals and specify the independent variables• Define baseline conditions• Identify performance parameters to measure and monitor
Task 2: Study Setup	<ul style="list-style-type: none">• Procure equipment and tools• Construct plots• Plant selected varieties• Install instrumentation and data collection system
Task 3: Perform Study	<ul style="list-style-type: none">• Operate and maintain experimentation plots• Collect onsite samples for processing and analysis• Perform field measurements and collect data• Download the data loggers• Perform plot maintenance activities• Send samples to labs and document lab reports• Monitor site surveillance data



Study Tasks – Continued

Task	Scope
Task 4: Data Analysis	<ul style="list-style-type: none">• Develop and implement data documentation architecture and data processing procedures• Develop and execute calculation procedure for the key performance parameters• Develop and rollout dashboard for collected data and calculated performance parameters
Task 5: Data Evaluation and BMP Optimization	<ul style="list-style-type: none">• Examine and evaluate experimentation plots performance• Use result to develop and define optimized designs
Task 6: Study Deliverables	<ol style="list-style-type: none">1. Study Report – Concise account of the study objectives, data, analysis, results, conclusions, and recommendations.2. Design Manual – Practical guide to designing biofiltration nature-based BMPs3. Standard Plans – Series of plans and details as standard practice for biofiltration BMPs



Cost & Schedule

Task	Description	Cost	Completion Date
Begin Study	Execute funding agreement	N/A	Sep. 2022
Task 1: Goals & Parameters	Identify goals, baseline conditions and performance parameters	\$206,000	Nov. 2022
Task 2: Study Setup	Procure equipment, construct plots, procure and plant varieties, install instrumentation, setup communication system	\$304,000	Mar. 2023
Task 3: Perform Study	Operate and maintain plots, collect samples and data, download data loggers, maintain plots, document lab reports, monitor site	\$1,675,000	Mar. 2027
Task 4: Data Analysis	Develop and implement study architecture, perform calculations and modeling, develop and rollout dashboard	\$927,000	Sep. 2023
Task 5: Data Evaluation and BMP Optimization	Examine plot performances, develop and define optimized designs, implement optimized designs in experiment plots	\$324,000	Mar. 2027
Task 6: Study Deliverables	<ol style="list-style-type: none">1. Study Report2. Design Manual3. Standard Plans	\$360,000	Sep. 2027
Total		\$3,800,000	Sep. 2027



Funding Request

WASC	Year 1	Year 2	Year 3	Year 4	Year5	Total
CSMB	\$175,400	\$135,200	\$153,200	\$151,800	\$144,400	\$760,000
LLAR	\$175,400	\$135,200	\$153,200	\$151,800	\$144,400	\$760,000
LSGR	\$175,400	\$135,200	\$153,200	\$151,800	\$144,400	\$760,000
NSMB	\$175,400	\$135,200	\$153,200	\$151,800	\$144,400	\$760,000
ULAR	\$175,400	\$135,200	\$153,200	\$151,800	\$144,400	\$760,000
TOTAL	\$877,000	\$676,000	\$766,000	\$759,000	\$722,000	\$3,800,000*

* Labor – 67%, Materials 37%



Summary of Benefits

This Study will deliver :

- a) Optimum design, construction, operation, and maintenance of biofiltration systems.
- b) Enhanced uses of green infrastructure for efficient biofiltration, community enhancement, and for combating climate change.
- c) Sustainable water storage and sourcing solutions for consumptive use supply during dry periods.
- d) Renewable energy solutions for biofiltration operation and maintenance.
- e) Increased educational benefits of nature-based BMPs for communities.



Questions?

Microplastics in LA County Stormwater

Scientific Studies Program
Fiscal Year 2022-2023

Watershed Areas:

Central Santa Monica Bay

Lower Los Angeles River

Lower San Gabriel River

South Santa Monica Bay

Project Lead & Presenter: Dr. Andrew Gray, UC Riverside



Study Overview

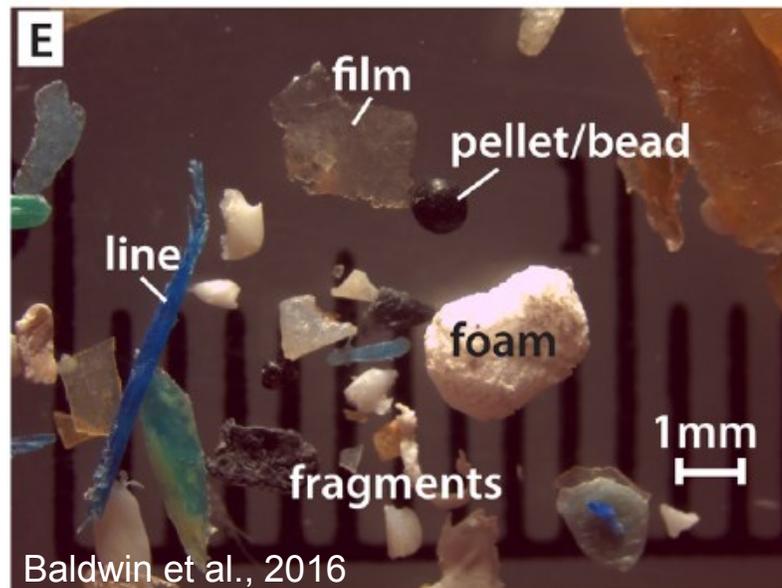
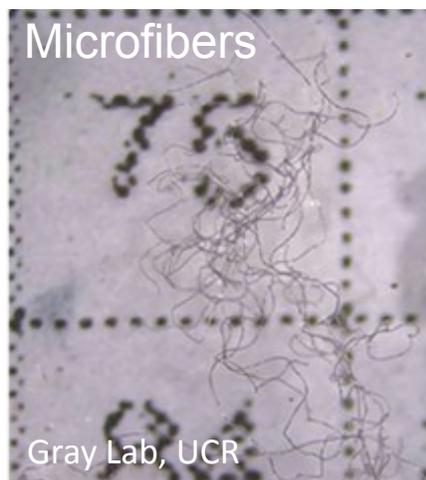
We propose to monitor and model microplastics in the stormflow of 4 stream channels in partnership with Los Angeles County Public Works.

Nexus: Contributions to microplastics monitoring, analysis, and modeling will be used to evaluate the processes controlling microplastics ambient concentrations and loading in stormwater and urban runoff, and advance, effective techniques for microplastics monitoring in rivers and streams.





Background – Microplastics



A diverse suite of contaminants

Size: 1 micron to 5 mm in size

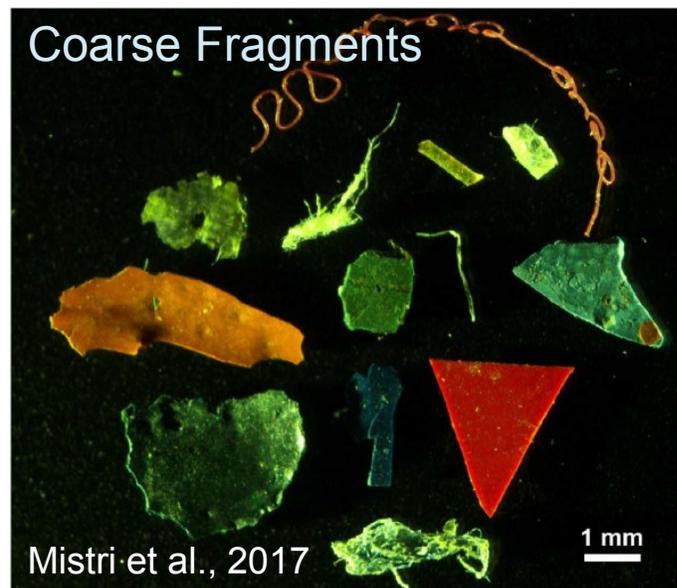
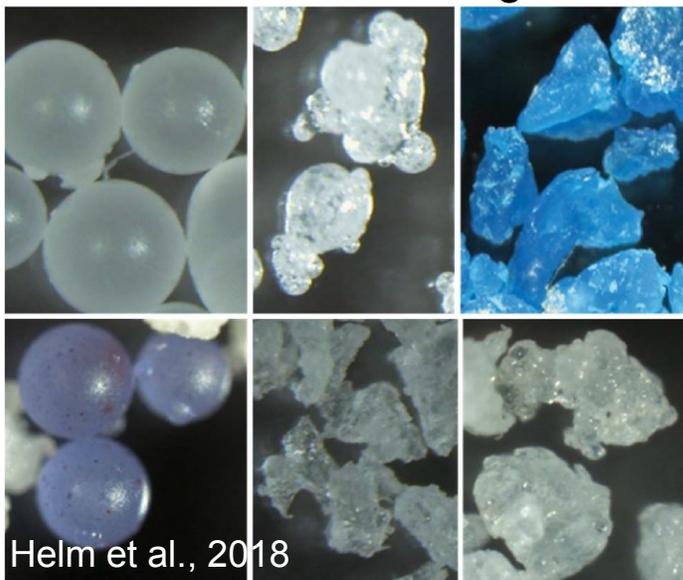
Morphology: from spherical to fibrous

Composition: thousands of plastics
chemical additives & sorbed
substances

Impacts: potential physical and chemical
risks to aquatic biota and human
health

Microbeads

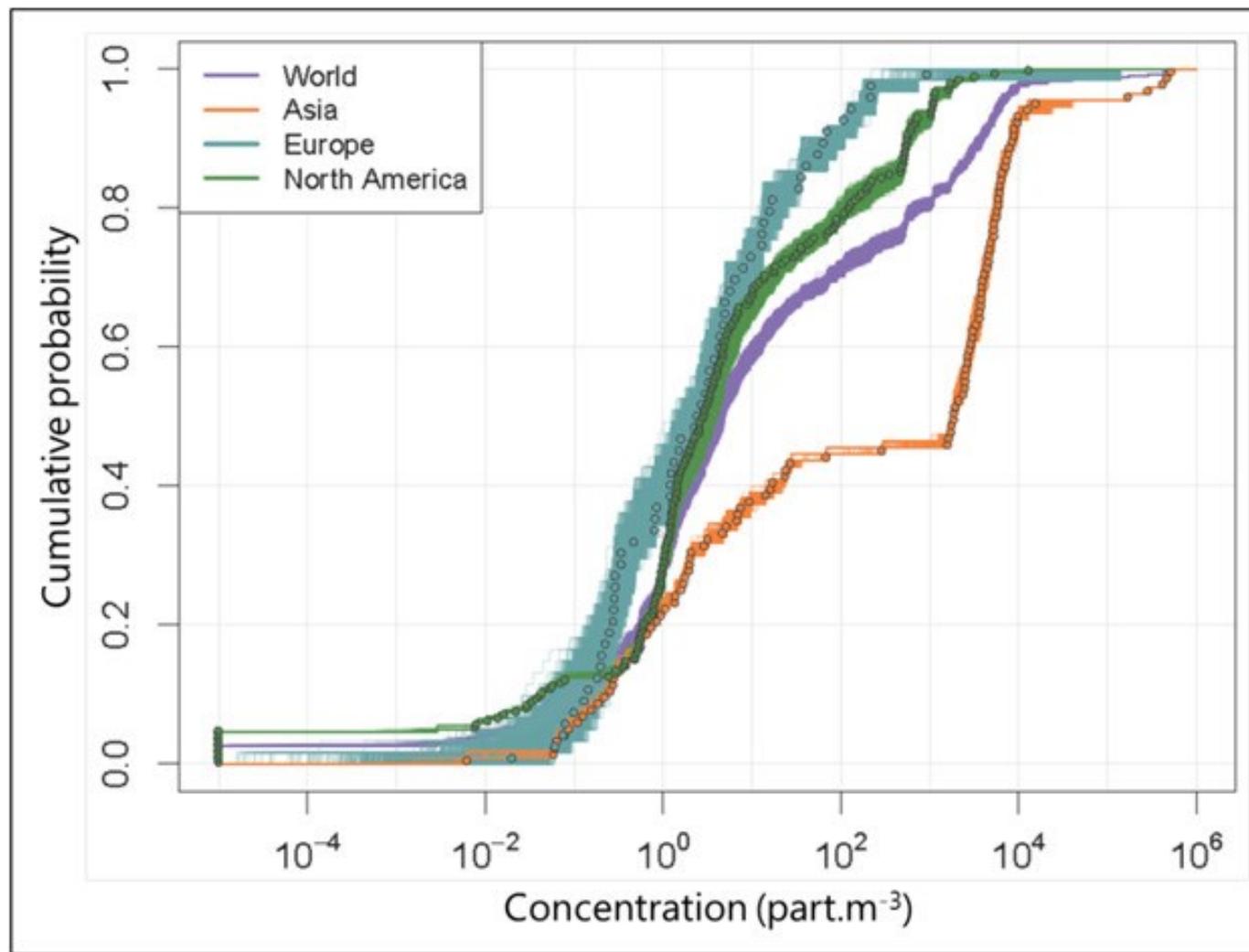
Fragments





Background – Microplastics in Rivers

Freshwater Concentration: 10^{-4} to 10^6 microplastics per cubic meter



Adam et al. 2019

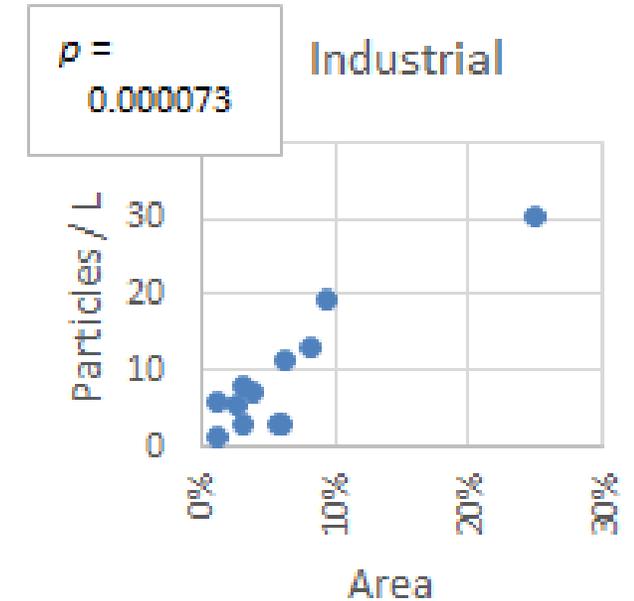
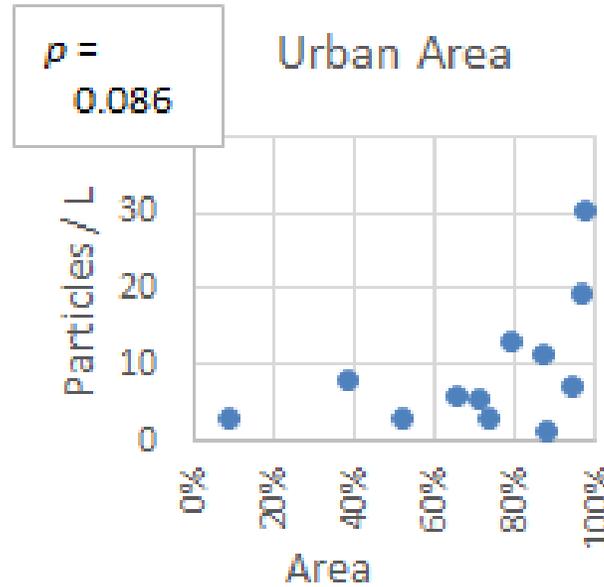


Background – Lessons from San Francisco Bay

Highly urbanized and industrialized watersheds



Higher microplastics loading in stormwater



Sutton et al. (2019)



Problem Statement

- Microplastics are pollutants of increasing concern.
- Urban rivers are likely to be heavily contaminated with microplastics.
- Little is known about the drivers of microplastics concentration and flux in stormflow.
- Optimal stormflow monitoring techniques have not been established.
- Little monitoring in Southern California (so far).

Study Objectives

1. Monitor microplastics pollution at LA County mass emission stations.
2. Model microplastics fluxes from LA County rivers and streams.
3. Refine microplastics monitoring techniques for broader application.



Study Details

Previous and Ongoing Microplastics Studies

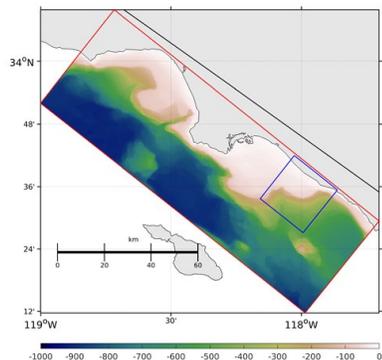
Microplastics Methods

Partners

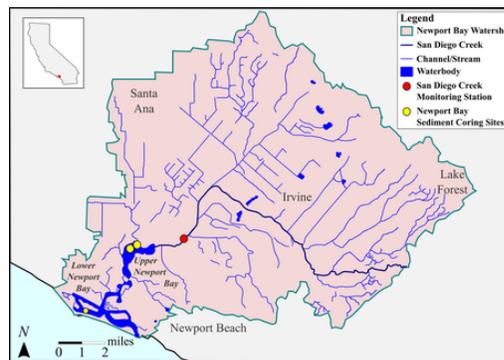


> 35 participating laboratories

San Pedro Bay



Newport Bay



Santa Ana River



LAC Stormflow Pilot



Study Type

Inter-laboratory comparison study to harmonize methodologies

Integrated river/coastal ocean monitoring/modeling

Fluvial flux and sedimentation monitoring

Preliminary investigations/ Method Development

Initial river monitoring with LACPW autosamplers

Target

Microplastics

Microplastics

Macro/Microplastics

Macro/Microplastics

Microplastics

Study Systems

Laboratory analysis of blind samples from water, sediment and tissue matrices spiked with a range of microplastics particles.

- Los Angeles River
- San Gabriel River
- Coyote Creek
- Santa Ana River below Prado
- San Pedro Bay

- San Diego Creek
- Santa Ana Delhi Channel
- Marsh and subtidal sediment

- Santa Ana River above Prado
- Arlington Channel

- Los Angeles River
- Ballona Creek
- Dominguez Channel
- Malibu Creek



Study Locations



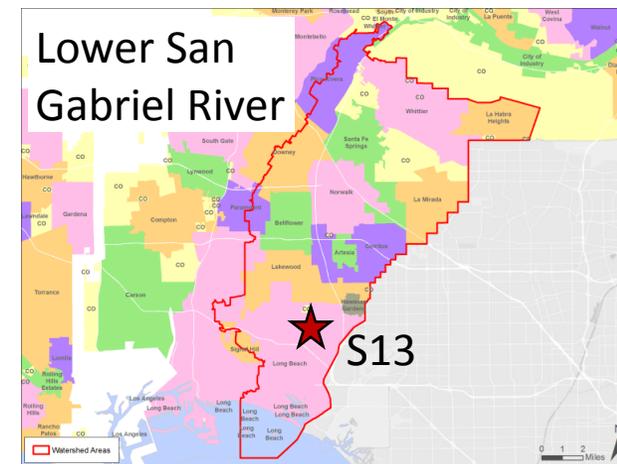
S01: Ballona Creek



S10: Los Angeles River



S28: Dominguez Channel



S13: Coyote Creek

★ LA County Mass Emission Stations

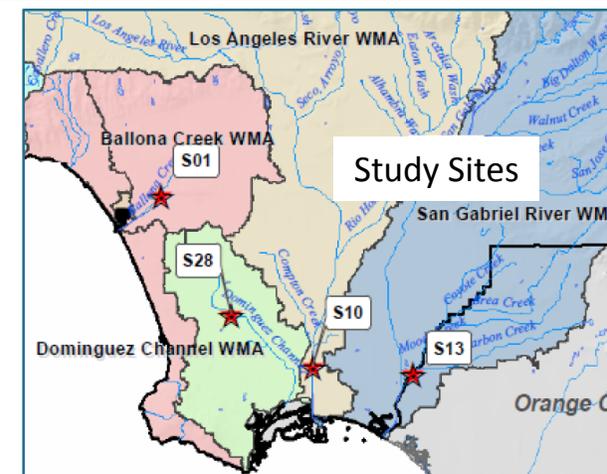


Study Details

Study Methods

4 LAC Mass Emission Stations (MES)

- **Ballona Creek** (S01; Watershed Area: Central Santa Monica Bay Region)
- **Los Angeles River** (S10; Watershed Area: Lower Los Angeles River Region)
- **Coyote Creek** (S13; Watershed Area: Lower San Gabriel River)
- **Dominguez Channel** (S28; Watershed Area: South Santa Monica Bay)

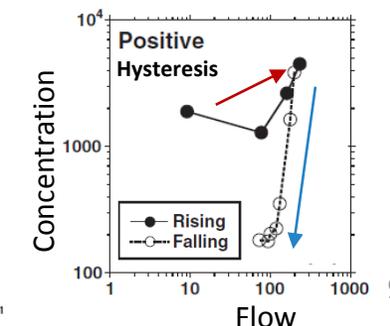
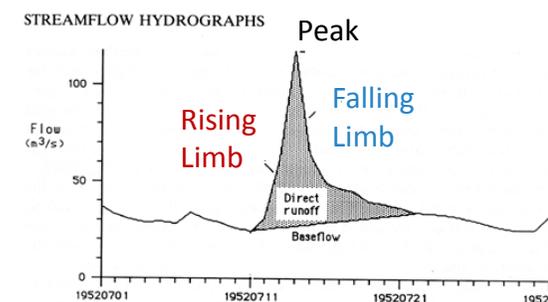


Wet season monitoring during each of years 1, 2, and 3

- 3 stormflow sampling events per year per MES
- Each sampling event = 2 samples:
 - **LAC**: bulk water (10-40 L); fixed intake point; autosampler
 - **UCR**: net (1-20 m³) and bulk water (3-10L); flow integrated, crane deployed sampling devices
- **First flush** events prioritized when possible
- Additional storm event **hysteresis** monitoring once per MES



MES	Microplastics Samples (n) from Stormwater															
	S01			S10			S13			S28			Total			
Institution/Year	y1	y2	y3	y1	y2	y3	y1	y2	y3	y1	y2	y3	y1	y2	y3	Total
LACPW	3	3	3	3	3	3	3	3	3	3	3	3	12	12	12	36
UCR	3	6	3	3	6	3	3	3	6	3	3	6	12	22	22	48





Study Details

Laboratory Extraction

- Organic digestion
- Density separation
- Size fractionation



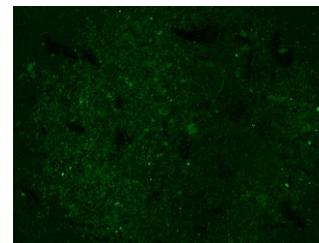
Identification & Characterization

- Brightfield & Fluorescent microscopy with automated image analysis
- μ -FTIR spectroscopy; SEM EDS (tire wear)
- Blanks, QA/QC

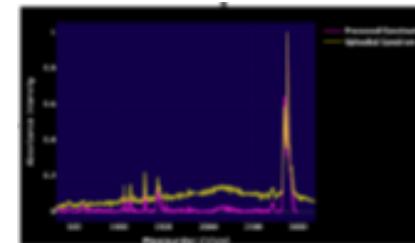
Morphological Characterization



Fluorescence Micro.



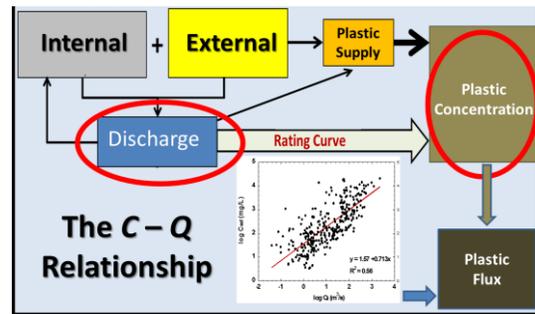
Polymer Characterization



Flux Modeling

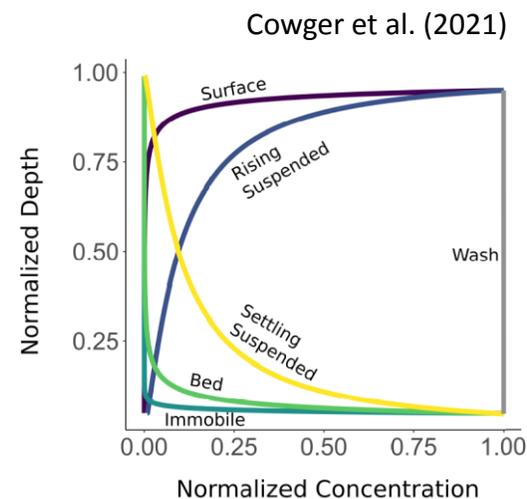
- Microplastics concentration results
- LAC MES discharge data
- Concentration-discharge rating curves
- Watershed composition evaluation
- Integration with regional microplastics modeling

Watershed Factors



Monitoring Optimization

- Comparison of LAC autosampler and UCR flow integrated results in terms of concentration, particle size distribution, and polymer compositions
- Evaluation of representative sampling
- Sample effort and cost assessment





Cost & Schedule

Study Component	Year 1				Year 2				Year 3			
	2022				2023				2024			
	W	Sp	Su	F	W	Sp	Su	F	W	Sp	Su	F
Study design (<i>completed by initiation of project</i>)	■											
Microplastics monitoring of LAC stormflow	■	■		■	■	■		■	■	■		
Microplastics flux modeling				■	■	■	■	■	■	■	■	
Monitoring optimization analysis							■	■	■	■	■	
Stakeholder and technical advisory committee meetings	■	■	■	■	■	■	■	■	■	■	■	■
Final reporting										■	■	■



Funding Request

WASC	Year 1	Year 2	Year 3	Total
CSMB	\$85,158.75	\$86,442.50	\$76,150.25	\$247,751.50
LLAR	\$85,158.75	\$86,442.50	\$76,150.25	\$247,751.50
LSGR	\$85,158.75	\$86,442.50	\$76,150.25	\$247,751.50
SSMB	\$85,158.75	\$86,442.50	\$76,150.25	\$247,751.50
TOTAL	\$340,635.00	\$345,770.00	\$304,601.00	\$991,006.00

Cost per WASC: **\$247,751**

Total Cost: **\$991,006**

Additional Matching Funds: **\$69,279 (UCR)**

Direct Cost Description: **Personnel (79%), materials/supplies (16%), and travel (5%).**



Summary of Benefits

This study will provide LAC and partner watersheds with answers to the following key questions on microplastics pollution:

1. **How many and what kinds of microplastics are in LAC stormwaters?** Characterizing microplastics in stormwater will allow managers to build a baseline understanding of how much and what kind of microplastics get into California surface waters from stormwater.
2. **What are the optimal methods for monitoring microplastics in stormflow?** Developing robust, reproducible, and cost-effective methods for sampling microplastics in stormflow is essential for supporting the benefits above, and will inform local to statewide microplastics monitoring in the future.
3. **Can we predict the levels of microplastics for the future?** Understanding the role of stormwater in watershed to regional microplastics budgets will further our understanding of microplastics pollution in the region, allowing us to predict microplastics fluxes in unstudied watersheds and with changes to watershed composition over time.

***Communication & Outreach.** The findings of this study will also be used to educate the community on the topic of microplastics pollution through open stakeholder meetings, presentations, and community outreach. Through increased community engagement, the results of this study will increase public awareness of the current state of knowledge on microplastics. Results will be published in SCWP reports and peer-reviewed literature.*



Questions?



References Cited

Adam V, Yang T, Nowack B. 2019. Toward an ecotoxicological risk assessment of microplastics: Comparison of available hazard and exposure data in freshwaters. *Environmental Toxicology and Chemistry*, 38: 436-447. DOI: <https://doi.org/10.1002/etc.4323>.

Baldwin AK, Corsi SR, Mason SA. 2016. Plastic Debris in 29 Great Lakes Tributaries: Relations to Watershed Attributes and Hydrology. *Environ. Sci. Technol.*, 50: 10377-10385. DOI: 10.1021/acs.est.6b02917.

Cowger W, Gray AB, Guilinger JJ, Fong B, Waldschläger K. 2021. Concentration Depth Profiles of Microplastic Particles in River Flow and Implications for Surface Sampling. *Environ. Sci. Technol.*, 55: 6032-6041. DOI: 10.1021/acs.est.1c01768.

Helm PA. 2017. Improving microplastics source apportionment: a role for microplastic morphology and taxonomy? *Analytical Methods*, 9: 1328-1331. DOI: 10.1039/C7AY90016C.

Mistri M, Infantini V, Scoponi M, Granata T, Moruzzi L, Massara F, De Donati M, Munari C. 2017. Small plastic debris in sediments from the Central Adriatic Sea: Types, occurrence and distribution. *Marine Pollution Bulletin*, 124: 435-440. DOI: <https://doi.org/10.1016/j.marpolbul.2017.07.063>.

Sutton R, Franz A, Gilbreath A, Lin D, Miller L, Sedlak M, Wong A, Box C, Holleman R, Munno K, Zhu X, Rochman C. 2019. Understanding Microplastic Levels, Pathways, and Transport in the San Francisco Bay Region. In: SFEI-ASC Publication #950, pp: 402 pp.

An aerial photograph of the Los Angeles coastline and city grid, showing the ocean on the left and the city extending inland to the right. The image is used as a background for the title and introductory text.

Community Garden Stormwater Capture Investigation

Scientific Studies Program

Fiscal Year 2022-2023

Central Santa Monica Bay Watershed

Los Angeles Community Garden Council

Diana Campos Jimenez, Juan Diaz-Carreras



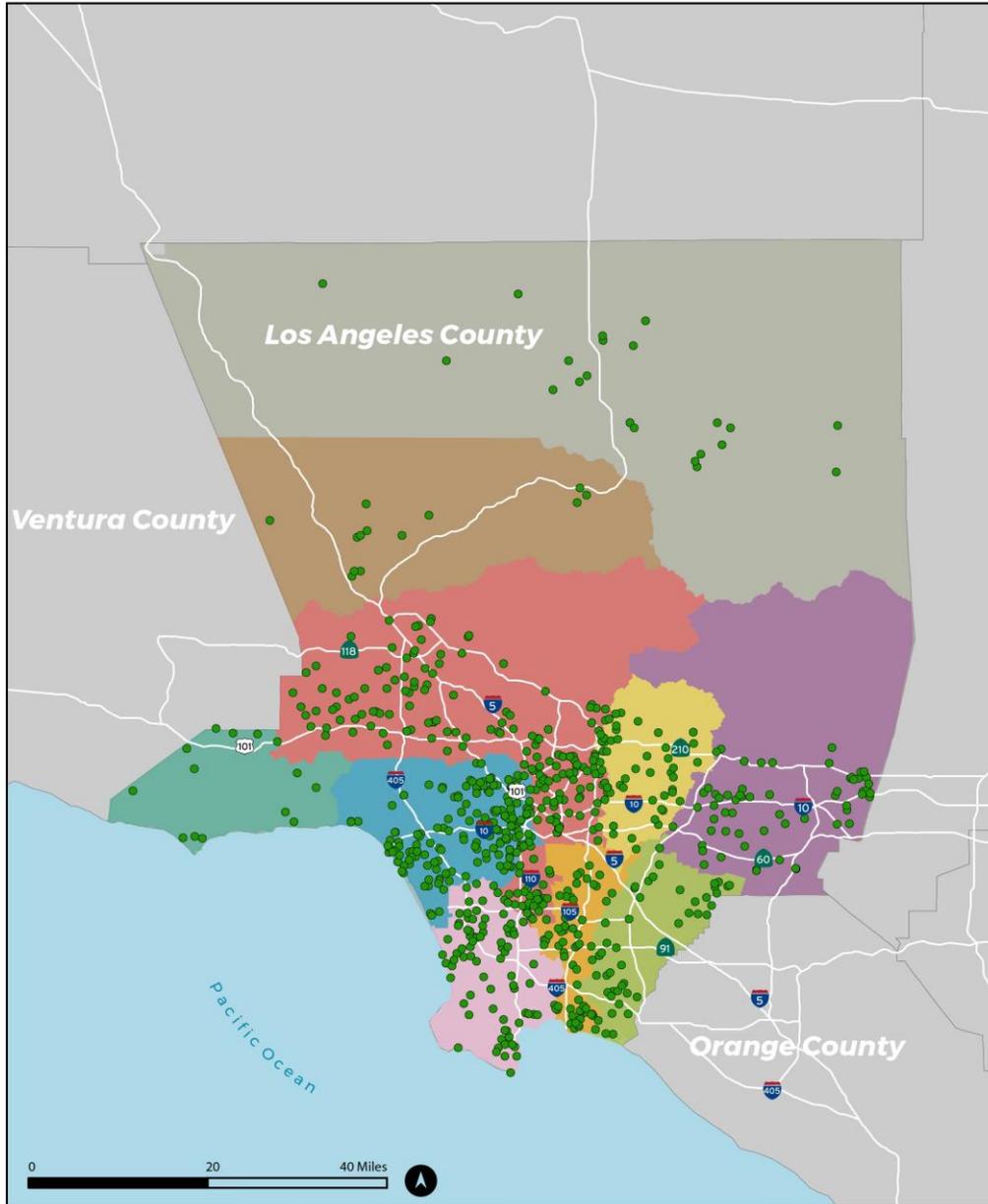
About Us!

- 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?

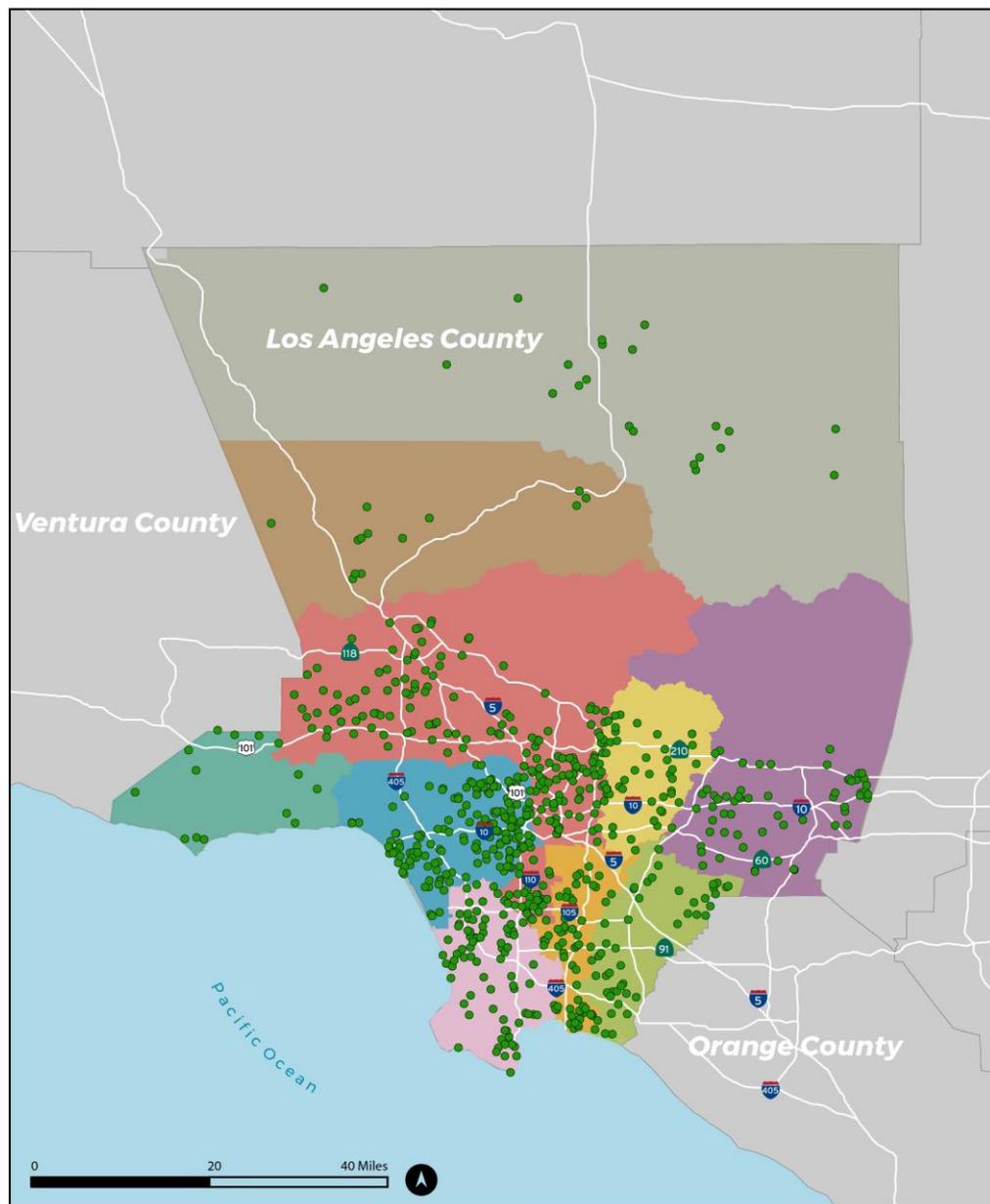
This study will investigate community gardens as a land use, identify site characteristics (i.e. land ownership, infiltration potential, etc.) to determine if the land use has the potential to contribute towards SCW Program goals.

- 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.





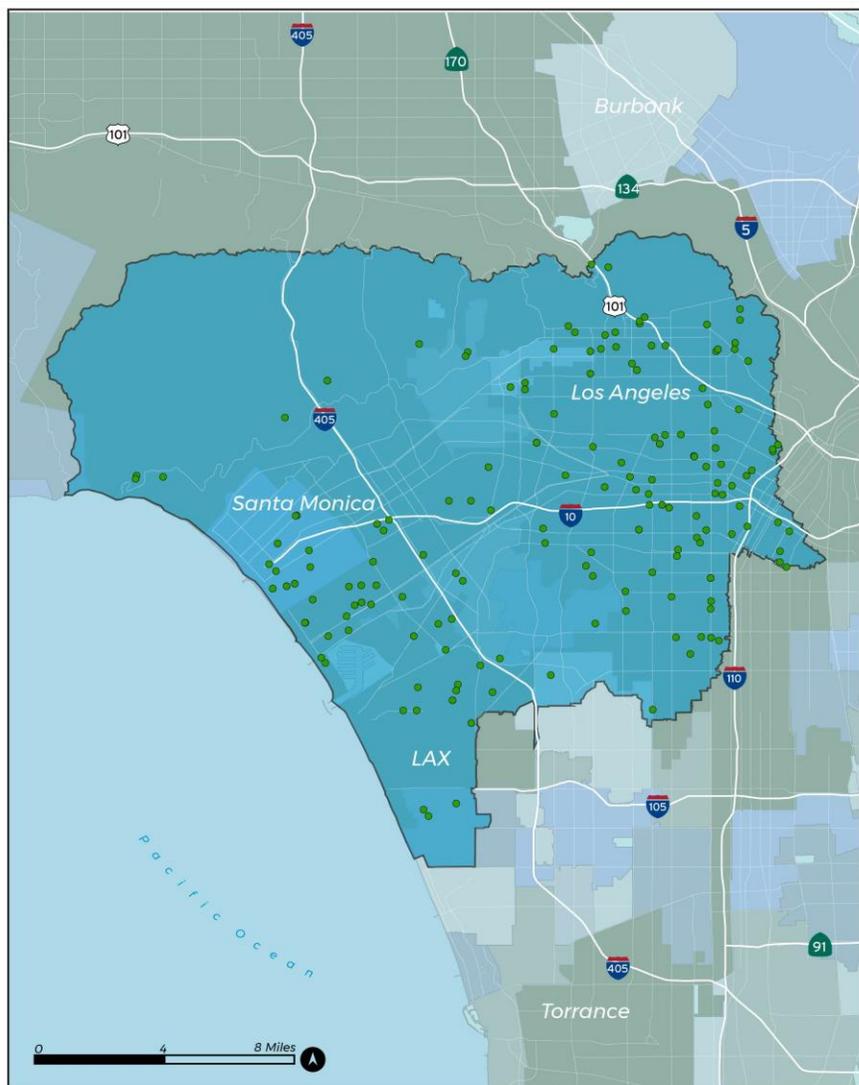
Project Location



- 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 ●
Central Santa Monica Bay (191)

Central Santa Monica Bay Watershed

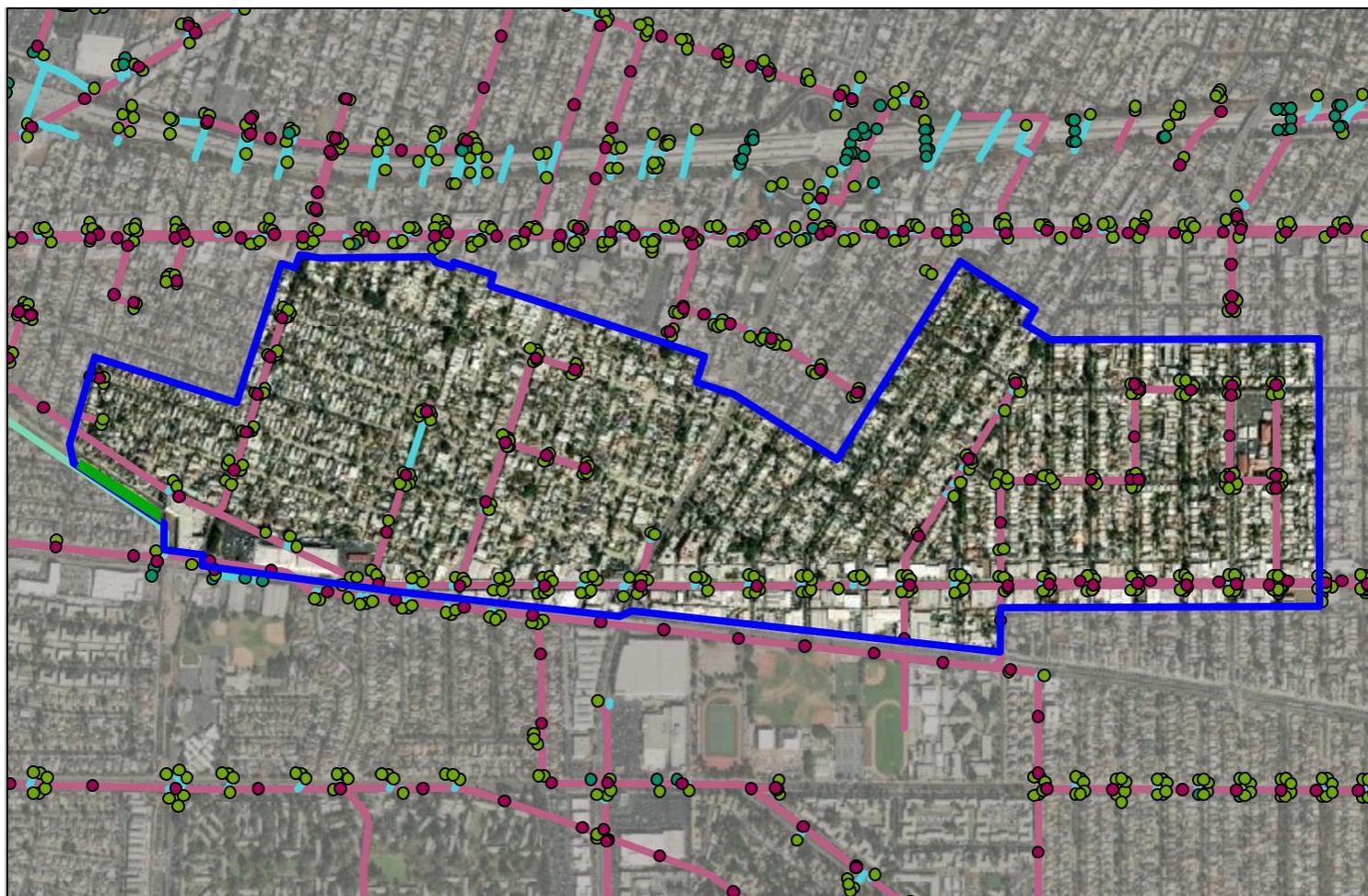
- 191 community gardens in the watershed



- Good Earth Community Garden
 - Approximately 1 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

	Good Earth Community Garden (1 acre)		Maintenance Hole		Gravity Main
	Watershed Area (398 acres)		Catch Basin		Lateral Line
					Open Channel

- Example Community Garden with Upstream Tributary Area
- Drainage area is 398 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?