

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



Thursday, October 14, 2021

1:00pm – 3:30pm

WebEx Meeting

Committee Members Present:

Ramy Gindi*, LA County Flood Control District (Agency)

Dave Rydman*, LA County Waterworks Districts (Agency)

David Pedersen, Las Virgenes Municipal Water District (Agency), Chair

Dave Roberts*, Las Virgenes Municipal Water District (Agency)

Madlyn Glickfeld, Institute of the Environment and Sustainability UCLA (Community)

Tevin Schmitt, Wishtoyo Chumash Foundation Ventura County (Community)

Kirsten James, Resident (Community)

Kelly Fisher*, Agoura Hills (Municipal)

Joe Bellomo*, Hidden Hills (Municipal)

Sophie Freeman, Los Angeles County (Municipal)

Bruce Hamamoto, Los Angeles County (Municipal)

Mark Johnson, Malibu (Municipal)

Roxanne Hughes, Westlake Village (Municipal)

Melina Sempill Watts, Melina Sempill Watts Inc. (Watershed Coordinator, non-voting member)

*Committee Member Alternate

Committee Members Not Present:

Chad Christensen, Mountains Recreation and Conservation Authority (Agency)

Doug Marian, CPMCA (Community)

Harry Semerdjian, LA Area Chamber of Commerce (Community)

Alex Farassati, Calabasas (Municipal)

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

1) Welcome and Introductions

David Pedersen, Chair of the North Santa Monica Bay (NSMB) WASC, welcomed Committee Members and called the meeting to order.

Kevin Kim 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 9, 2021

The District provided a copy of the meeting minutes from the previous meeting. Motion to approve the meeting minutes by Member Bellomo. Member Fisher seconded the motion. The committee voted to approve the September 9th, 2021 meeting minutes (approved, see vote tracking sheet).

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3) Committee Member and District Updates

Kevin Kim (District Staff) provided update:

- The District is initiating a fund transfer agreement process for projects that were approved for funding in Fiscal Year 2021-2022 SIPs. Addendums to projects that were approved in Year 1 were also sent out.
- The Scoring Committee has started to score Infrastructure Program projects. Liberty Canyon Project, led by LA County Public Works, will be scored on October 19th at the Scoring Committee meeting.
- On October 7th, the District provided an early implementation update to the Regional Oversight Committee (ROC). Updates and accomplishments were discussed and well received by the ROC.
- Regional Program project proponents are required to submit quarterly reports. The District is working on providing comments to Project Developers. A summary of quarterly reports will be provided to WASCs, although one is not foreseen for NSMB WASC. Next quarterly reports are due November 15th.
- Under the lead of the Board of Supervisors, WASC meetings will continue to happen virtually.

Member Bellomo asked if the District knew when meetings would be in-person again. District staff does not have a forecasted date.

Member Glickfeld provided an ex parte communication disclosure: Member Glickfeld has been in touch with SCCWRP to confirm that the organization will continue to do Scientific Studies reviews. Member Glickfeld also talked with Matt Frary (District Staff) to ensure that SCCWRP continues to be contracted to do Scientific Studies reviews.

4) Watershed Coordinator Updates

Coordinator Watts reminded the WASC that the Calabasas Pumpkin Festival is taking place on Sunday, October 17th.

Coordinator Watts also clarified that there are two “Liberty Canyon Projects” in consideration. The Liberty Canyon Project that is being reviewed by the Scoring Committee on October 19th is the one led by LA County Public Works, not the LA County Flood Control District.

Coordinator Watts conveyed comments from Member Christensen:

- Expressed support for the Pathogen Reduction Scientific Study
- Not in support of the Community-Centered Optimization of Nature-Based BMPs starting with the Gaffey Nature Center Facility Scientific Study

Coordinator Watts provided updates with a presentation:

- A watershed community meeting was conducted on September 23rd, 2021 from 5:30 p.m. to 7:30 p.m. The meeting was featured on Malibu Times.
- Coordinator Watts provided a land acknowledgement to the Chumash and Tongva Peoples.
- Community member presentations by John Gardner, Architect, and Abel Cruz Gutierrez, Fog Catchers were described.
- Presented ideas for next watershed community meeting:
 - Suggested moving the date to Thursday, January 27th, 5:30 – 8 p.m.

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- Would like to invite Team Trash Warriors, Carrie Carrier (Topanga Town Council President), LVMWD (Pure Water Project)
- Presented project concepts that were identified and being developed
- Currently waiting for a suitable community project to arise before getting involved with technical assistance teams
- Currently working with partnerships and extensive networks
- Co-wrote a grant for the third supervisorial district to fund native plants kit project
- Currently exploring wildlife conservation board grant opportunities for Liberty Canyon Creek Restoration Project idea
- Exploring Innovative Conservation Grant from Metropolitan Water District (MWD) for Native Kits Project
- Exploring Local Resources Program MWD grant for Los Angeles Unified School District (LAUSD) project
- Coordinating with other Watershed Coordinators
- Will be coordinating with other Watershed Coordinators on engagements with public schools for project development

Member Bellomo had attended the community meeting and praised Coordinator Watts for effective organization of the meeting.

Member Hughes watched the recording of the community meeting and echoed Member Bellomo's praises; asked if fog catchers can be installed on a residential level. Coordinator Watts responded that fog catchers can be priced up to \$2,000 per fog catcher and that the costs depend on where they are located.

Member Glickfeld suggested following the fog catcher founders' work to further showcase the fog catcher project with the public. Coordinator Watts noted that there are many public facing advocates for fog catcher technology who can be included in that effort.

5) Public Comment Period

There were no public comments.

6) Discussion

a. Ex Parte Communication Disclosure

Member Glickfeld provided an ex parte communication disclosure under Agenda Item 3.

No other ex parte communications were disclosed.

b. Presentations for Scientific Studies Program

i. Regional Pathogen Reduction Study

Presented by Richard Watson of Richard Watson & Associates and the lead consultant to the Los Cerritos Channel Watershed Group (see Attached: Project Presentations). This Study aims to use

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the latest available science to measure water-borne pathogens across watersheds and seeks funding from eight of the nine WASCs.

The Study has been presented to several WASCs in the past. NSMB WASC was not included in the funding request last year, but the proposal is in front of all nine WASCs this year.

Member Schmitt asked whether the Study would discuss the possibilities for future testing capabilities. Mr. Watson noted that the Study will be consulting with their expert panels. Mr. Watson foresees the use of multiple markers for pathogens.

Member Glickfeld called for Alternate Member Rich Ambrose to ask questions about the Study.

Alternate Member Ambrose noted that the details of the Study are not very defined, making the study hard to evaluate. Questions included: how will decisions be made in the committee? Who will be on the committee? Alternate Member Ambrose referred to Figure 3, Attachments for Section 2.4, where committee categories were listed, but would like more clarification on how many members and how the committee will make decisions.

Mr. Watson noted that based on previous experience with similar projects, there needed to be flexibility in the committee and how the committee works. Mr. Watson noted that the project has commitment from the Regional Water Boards; two or three water quality NGOs would likely be involved in the committees; those who were involved with the Surfrider Health Study and SCCWRP will likely be involved as well. Mr. Watson reported that the Gateway Water Management Authority will be the entity who will be putting out the RFP. Mr. Watson anticipates that the stakeholder committee will likely be a team of a dozen.

Member Ambrose expressed understanding that the details are unclear because the committee who will be making the decisions has not been selected. Mr. Watson noted that the Study has been revised to address peer reviewer comments regarding the application's incompleteness and invited feedback and suggestions from Member Ambrose.

Chair Pedersen concluded the question-and-answer period due to time constraints and noted that there will be a chance to follow up and ask more questions while developing the Stormwater Investment Plan (SIP).

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

Presented 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.

A member of the public, Deborah Deets (LA Bureau of Sanitation), thanked Dr. Eftekhazadeh for collecting stormwater quality data, as there has been a need for the data in the past. Ms. Deets

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expressed support for the Study and noted that the Study will provide a variety of community benefits. Ms. Deets asked the WASC to thoroughly consider the Study.

Alternate Member Ambrose liked the idea of the Study and asked for more details about experimental design. Dr. Eftekharzadeh noted that SEITec has prepared a preliminary design that identifies study parameters, and that the project's first task will be to optimize study parameters; wells are available on-site for sampling; a weather station will be available on site to measure rainfall data.

Alternate Member Ambrose asked how pollutant removal will be measured. Dr. Eftekharzadeh responded that the Study will be able to measure what comes off the site, but tracking pollutants prior to arriving at the site will have to be controlled during the study. Dr. Eftekharzadeh noted that the Study is set up to measure rate of runoff into the site.

c. Presentation for Infrastructure Program

i. Liberty Canyon Road Green Improvement

Presented by Josafat Flores of LA County Public Works and Member Hamamoto (see Attached: Project Presentations). This Project located in the unincorporated community of Agoura Hills and aims to improve water quality and provide community enhancements. This Project is a smaller version of another project that had requested funding through the technical resource program in the past.

Member Glickfeld requested clarification on the drainage areas of the Project. Mr. Flores clarified that the Project will receive water from the residential drainage system on the west side of Liberty Canyon from County unincorporated area. The LACFCD project will be draining from areas north of the Project site. The east side of Liberty Canyon is the City of Agoura Hills.

Member Glickfeld noted she would be more interested in the project if there wasn't a more ambitious LACFCD project in the same area. Member Glickfeld asked how the Project will be working with LACFCD to ensure that the two projects do not interfere with each other. Member Glickfeld expressed concern regarding overlap with project construction and LACFCD project design stage.

Mr. Flores noted that LACPW will collaborate with LACFCD for the Project. LACPW had reached out to City of Agoura hills, but the City was not able to participate due to funding and scheduling complications. Member Hamamoto noted that there will not be much overlap between the two projects since the outfalls for the Project already exist.

Member Glickfeld asked for assurance that there will be a way to determine the final alignment with the creek before starting construction. Member Hamamoto noted that the Project's additions are outside of the right of way and will not interfere; any streets that are narrowed will not impact the Project. Member Glickfeld asked LACPW to consider the questions and the community's request for a two-lane road, which will result in narrowed streets. Member Hamamoto and Mr. Flores

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thanked Member Glickfeld for the questions and noted they will be considering the member and community's comments.

d. Alternate/Supplemental Funding Sources for Technical Resource Projects

Member Glickfeld noted that the committee was having difficulty providing funding for Technical Resources Program (TRP) projects. Due to the Safe, Clean Water Program's requirement that no more than 10% of the committee's funding go into the Technical Resource Program, the NSMB WASC cannot provide funding for more than 1 TRP project every few years.

Member Glickfeld highlighted the following options:

- Notify the District that the 10% criterion does not work for the NSMB, and that the committee needs more funding flexibility to address their stormwater and water supply concerns.
- Continue to request cities to collect funds
- Apply to state funding sources stormwater funds

Chair Pedersen noted a letter written by Member Forte that was sent to the Council of Governments, who unanimously supported it, and to Senator Henry Stern, who tried to secure funds, but it did not come to fruition. Chair Pedersen requested ideas for alternative funding sources from the committee.

Chair Pedersen suggested that the committee continues its efforts with the Council of Governments and Senator Henry Stern for the next budget year, since cities are supporting it. Coordinator Watts agreed with Chair.

7) Public Comment Period

There were no public comments.

8) Items for next agenda

District staff noted that the November meeting will be cancelled as it conflicts with Veterans Day. The next meeting will be held on December 9th.

Member Glickfeld requested that decisions about Scientific Studies wait until the WASC receives peer review.

Member Glickfeld requested that agenda item 6.d be added to the next meeting and that the committee members brainstorm ideas for alternative funding sources.

Coordinator Watts confirmed with the committee that there was no opposition to moving the next watershed community meeting to January.

9) Adjournment

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Chair Pedersen thanked WASC members and the public for their attendance and participation and adjourned the meeting at 2:55 p.m.

Next Meeting:

Thursday, December 9, 2021

1:00 PM – 3:00 PM

See SCW website for meeting details

NORTH SANTA MONICA BAY WASC MEETING - October 14, 2021

		Quorum Present				Items
Member Type	Organization	Member	Voting?	Alternate	Voting?	9/9 Meeting Minutes
Agency	LACFCD	Cung Nguyen		Ramy Gindi	x	A
Agency	LAC Waterworks District	Russ Bryden		Dave Rydman	x	Y
Agency	MRCA	Chad Christensen		Sarah Rascon		
Agency	LVMWD	David Pedersen	x	Dave Roberts		Y
Agency	LVMWD	David Pedersen		Dave Roberts	x	Y
Community Stakeholder	UCLA	Madelyn Glickfeld	x	Richard Ambrose		Y
Community Stakeholder	CPMCA	Doug Marian				
Community Stakeholder	LA Area Chamber of Commerce	Harry Semerdjian				
Community Stakeholder	Wishtoyo Chumash Foundation Ventura County	Tevin Schmitt	x			Y
Community Stakeholder	Community Stakeholder	Kirsten James	x			Y
Municipal Members	Agoura Hills	Jessica Forte		Kelly Fisher	x	Y
Municipal Members	Calabasas	Alex Farassati		Alba Lemus		
Municipal Members	Hidden Hills	Kerry Kallman		Joe Bellomo	x	Y
Municipal Members	LAC Supervisor District 3	Sophie Freeman	x			Y
Municipal Members	LAC Public Works	Bruce Hamamoto	x	Allen Ma		Y
Municipal Members	Malibu	Mark Johnson	x	Christine Shen		Y
Municipal Members	Westlake Village	Roxanne Hughes	x	Phillipe Eskandar		Y
Watershed Coordinator	Melina S. Watts Consulting, LLC	Melina Watts	x			N/A
Total Non-Vacant Seats		17			Yay (Y)	12
Total Voting Members Present		13			Nay (N)	0
Agency		4			Abstain (A)	1
Community Stakeholder		3			Total	13
Municipal Members		6				Approved

Other Attendees
Alberto Grajeda
Deborah Deets
Isabelle Duvivier
Jared Ervin
Josafat Flores
Kam Cheema
Kelsey Reed
Lauro Alvarado
Mayra Martinez
Paul Glenn
Richard Watson
Ryan Edgley
Shahriar Eftekhazadeh
Stacy Luell
Nooshin Eftekhazadeh



SAFE CLEAN WATER PROGRAM

North Santa Monica Bay Watershed Co-Coordination Updates

By Melina Sempill Watts

October 14, 2021

Photo and Logo, Los Angeles County

1. Facilitate Community Engagement

Co-hosted first North Santa Monica Bay Watershed Community Meeting on September 23, 2021

The screenshot shows the homepage of The Malibu Times website. At the top, there are social media icons for Facebook, Twitter, and LinkedIn, along with 'Sign Up' and 'Log In' buttons. The main headline is 'Residents Invited to Attend Virtual Santa Monica Bay Watershed Community Meeting', dated Sep 22, 2021. Below the headline is a large image for the 'Safe Clean Water Program' with the URL safecleanwaterla.org. To the right of the main article are two smaller featured articles: one for 'Patched-up Realtors' and another for 'Guidance' by Shen Realty. At the bottom right, there is a weather widget showing '66° Cloudy' and a 'Newstand Edition' button. The website footer includes a small thumbnail of the newspaper's front page.

Land Acknowledgement:
Thank you to the
Chumash
and
Tongva Peoples

Past,
Present
and Future

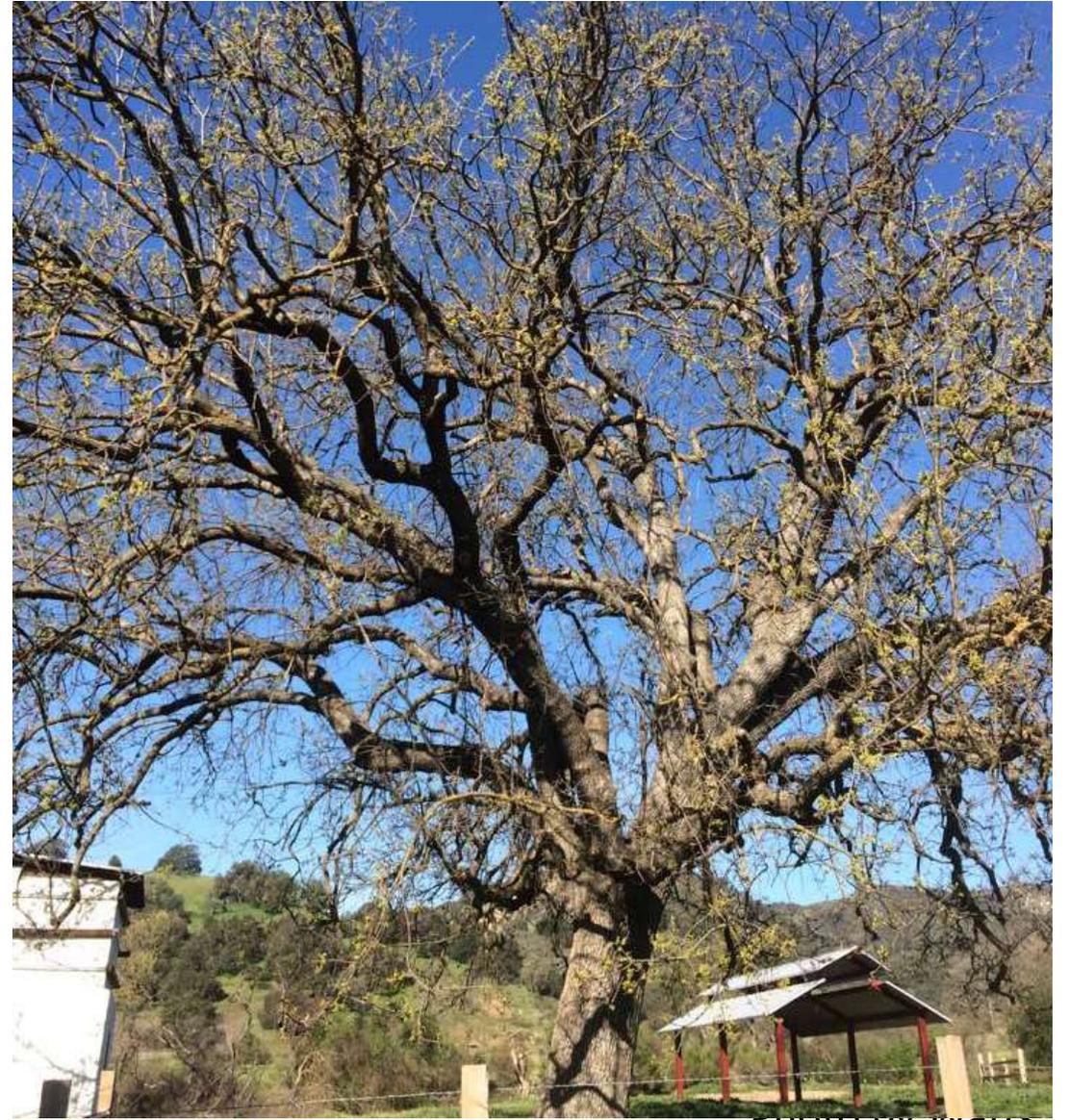


PHOTO by watts

Community Members Who Co- Hosted...Thank You

- Bill Buerge, Owner Mountain Mermaid, Topanga Resident
- Jeremy Wolf, Chief of Staff, Senator Stern's Office
- Susan Nissman, Topanga Resident



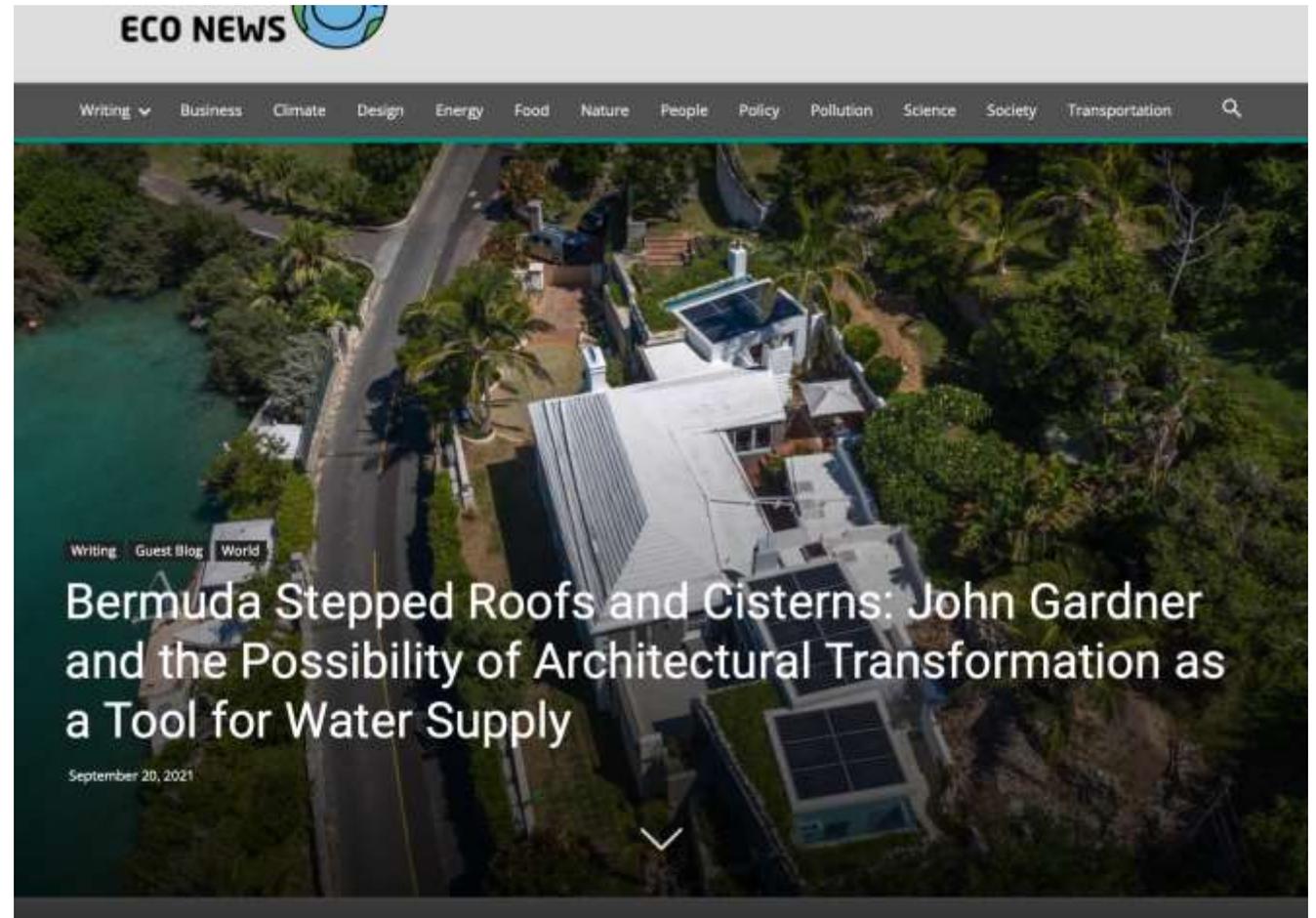
Photo by Watts

NSMB WASC Stakeholders at the NSMB Watershed Community Meeting...*Thank You*

- ***County of Los Angeles Department of Public Works, Bruce Hamamoto, Alberto Grajeda and Josafat Flores Measure W and Safe, Clean Water L.A.***
 - ***Viewridge Estates Water Quality Project***
 - ***Liberty Canyon Water Quality Project***
- ***County of Los Angeles Department of Public Works, Flood Control, Tiffany Chung***
- ***Los Angeles County Waterworks, District 29, Terri Alex***
- ***Las Virgenes Municipal Water District, Dave Roberts***
- ***California Department of State Parks, Danielle LeFer***
- ***National Parks, Danika Giobokar***
- ***Wishtoyo Foundation, Tevin Schmitt***
- ***Los Angeles Regional Water Quality Control Board, Dr. LB Nye***
- ***Resource Conservation District of the Santa Monica Bay, Water Quality Projects, Rosi Dagit***
- ***Restoration Projects (Big Sycamore, Trancas, Topanga)***
- ***Water Quality Research, Past and present***
- ***Southern Steelhead Trout in the Santa Monica Mountains, Status Report***



John Gardner, Architect / Artist: Bermuda's White Stepped Roofs + Cisterns



Bermuda Stepped Roofs and Cisterns: John Gardner and the Possibility of Architectural Transformation as a Tool for Water Supply

Guest post by: [Meilina Sempill Watts](#)

In Bermuda, the islands are sprinkled by buildings that look like cakes topped by white frosting. The aesthetic enchantment is incidental because at heart, these stepped white limestone roofs and cistern pairings are built to capture rainwater for domestic use. Consider

TRANSLATE LANGUAGE

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Abel Cruz Gutierrez, Peruanas Sin Agua: Fog Catchers

Presentation made possible thanks to interpretation by Javier Marrone, UCLA, as recommended by watershed coordinator Carlos Moran.



Photo by Peruanas Sin Agua



Ideas for the Next North Santa Monica Watershed Community Meeting + Date

Ideas

- Joseph Rendo and Team Trash Warriors, as suggested per Jeremy Wolf
- Carrie Carrier, President, Topanga Town Council, Presentation on Topanga Canyon Road Boulevard Committee and CALTRANS Focusing on Agreement Not to Use Pesticides
- Pure Water Project, LVMWD

Date

- Next quarter: suggestion, move from December to Thursday, January 27, 2021

Time

- 5:30-7:30 or 5:30 – 8:00 or as NSMB WASC suggests.



2. Identify and Develop Project Concepts

- **Liberty Canyon Creek Restoration concept discussion with cities and agencies moved to November 3, 2021**
- Reached out to **Dr. Alisa Land Hill**, a parent who runs science program at **Topanga Elementary School** about potential **stepped roof / cistern project** at Topanga elementary School; teaching out to **Christos Chrysilio** at LAUSD about same idea
- **Multiple community members interested in building fog catchers on their own property including Ken Widen, Topanga and Kian and Joel Shulman, Malibu**, as are members of Ventura land Trust (out of watershed but community leaders nevertheless)
- **Introduced Dave Roberts to Jenn Rodriguez and Growing works and set up native plants nursery tour with Antonio Sanchez and Dave Roberts at NPS site.**
- Reconnected Malibu property owner **Naomi Louise Warne** to **RCDSMM** for **potential creek restoration project in Ramirez Canyon**
- Setting up conversation with **Danielle Lefer, California Department of State Parks** about **Bluffs Restoration with Wildlife Conservation Board**



SLENDER
SUNFLOWER

3. Work with Technical Assistance Teams

**Waiting for a suitable community
project to rise to the fore.**

Photo by Watts

4. Facilitate Identification and Representation of Community Priorities

See item 2.



Photo by Watts

A scenic sunset over a body of water, likely a lagoon or bay. The sky is filled with soft, colorful clouds in shades of orange, yellow, and blue. In the foreground, there are silhouettes of palm trees and a white building with a distinctive tower or chimney. The overall atmosphere is peaceful and tropical.

5. Integrate Priorities Through Partnerships and Extensive Networks

- Reached out Christos Chrysilio, Director of Architectural & Engineering Services, LAUSD to discuss possible Bermuda roof / cistern project at LAUSD
- Exploring idea of bringing Abel Cruz Gutierrez to L.A. County to select sites for fog catchers
- Invited Loni Yost, SCE to participate in potential Liberty Canyon Creek conversation event
- Thanks to Madelyn Glickfeld connected with Renee Purdy, regional board who invited Dr. LB Nye to talk water quality to NSMBWC
- Connected Tiffany Chung + Rosi Dagit to discuss Trancas Lagoon restoration



6. Cost-Share Partners

- Co-wrote Grant for Supervisorial District 3 with Las Virgenes Municipal Water District, TreePeople and Treetrust to fund Native Plants Kit project to reduce water use / reduce fertilizer use / decrease erosion
- Invited Waterworks district 29/LVMWD to participate in native plants collaboration including California Native Plants Sale
- City of Malibu / LVMWD to partner on CA Native plants' sale with LVMWD

7. Leverage Funding

- Exploring Wildlife Conservation Board grant opportunities for Liberty Canyon Creek restoration project idea
- Exploring Innovative Conservation Grant from Metropolitan Water District for Native Kits Project
- Exploring Local Resources Program Metropolitan Water District grant for LAUSD project at Topanga Elementary School

Photo by Watts



8. Local Stakeholder Education

- Held North Santa Monica Bay Watershed Community Meeting on 9/23/2021 invited Susan Nissman, Jeremy Wolf and Bill Buerge to co-host. Special guests: Los Sin Agua / guest for NSMWC meeting Abel Cruz Gutierrez and John Gardner, Bermuda architect
- Published article on Gardner
- Promoted event via media / social media
- Received coverage after event
- Promoted California Native Plants Society online sale hosted by Las Virgenes Municipal Water District





9. Watershed Coordinator Collaboration

- Joined funding group put together watershed coordinators
- Will join public school group
- Will be exploring watershed coordinator group's interest in collaborating on Las Virgenes Muncipal Water District / TreePeople / TreeTrust's Native Plants Kit project

Clean water vs consumer culture

Exhibit A: a truck getting on the 101.

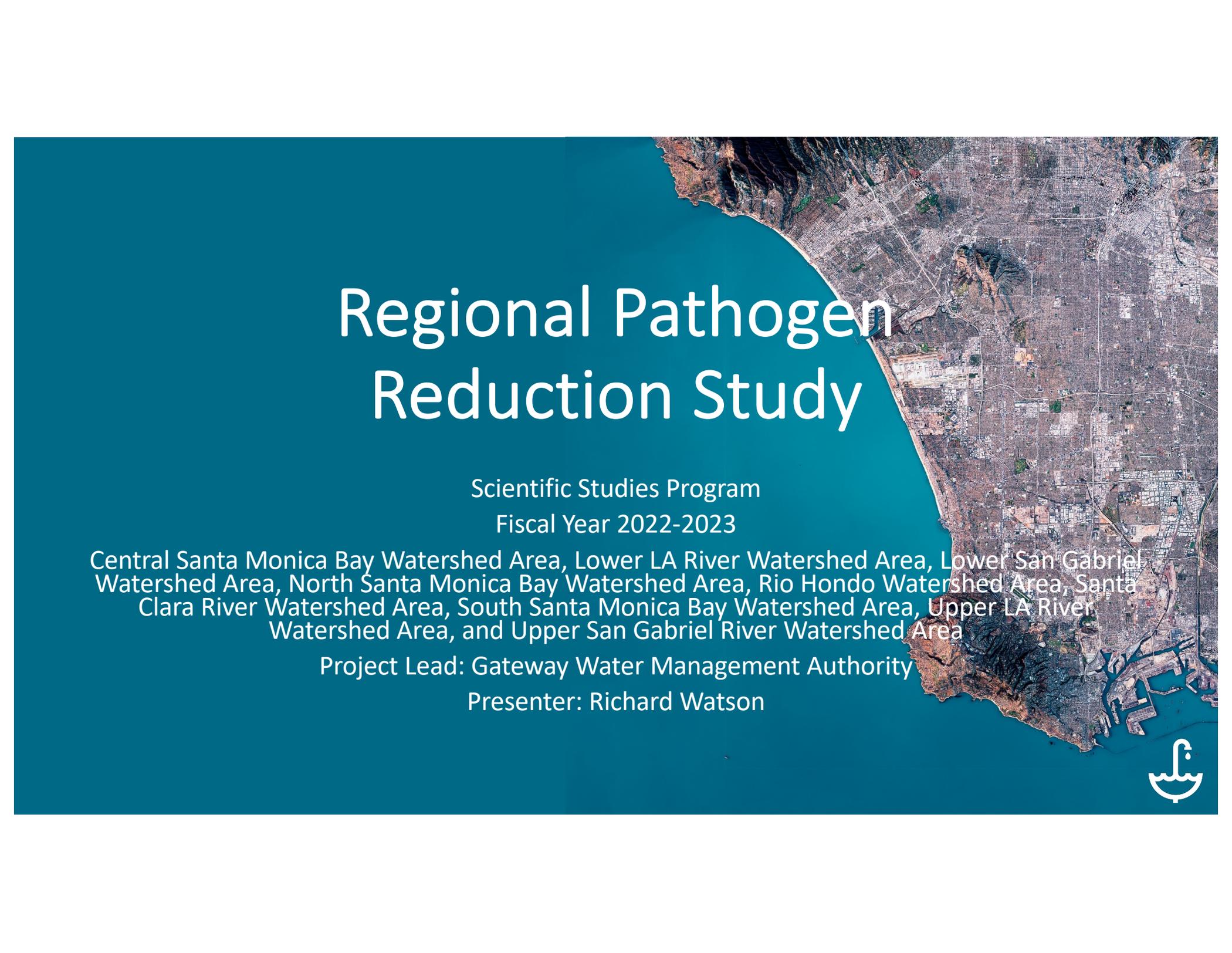
For all of you doing the work to design, build and manage clean water processes that improve water quality, I just wanted to observe that we are all up against an entrenched consumer culture that does not understand what our culture's lack of concern for water quality is doing.

And you do.

So, thank you.



Photo by Watts



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



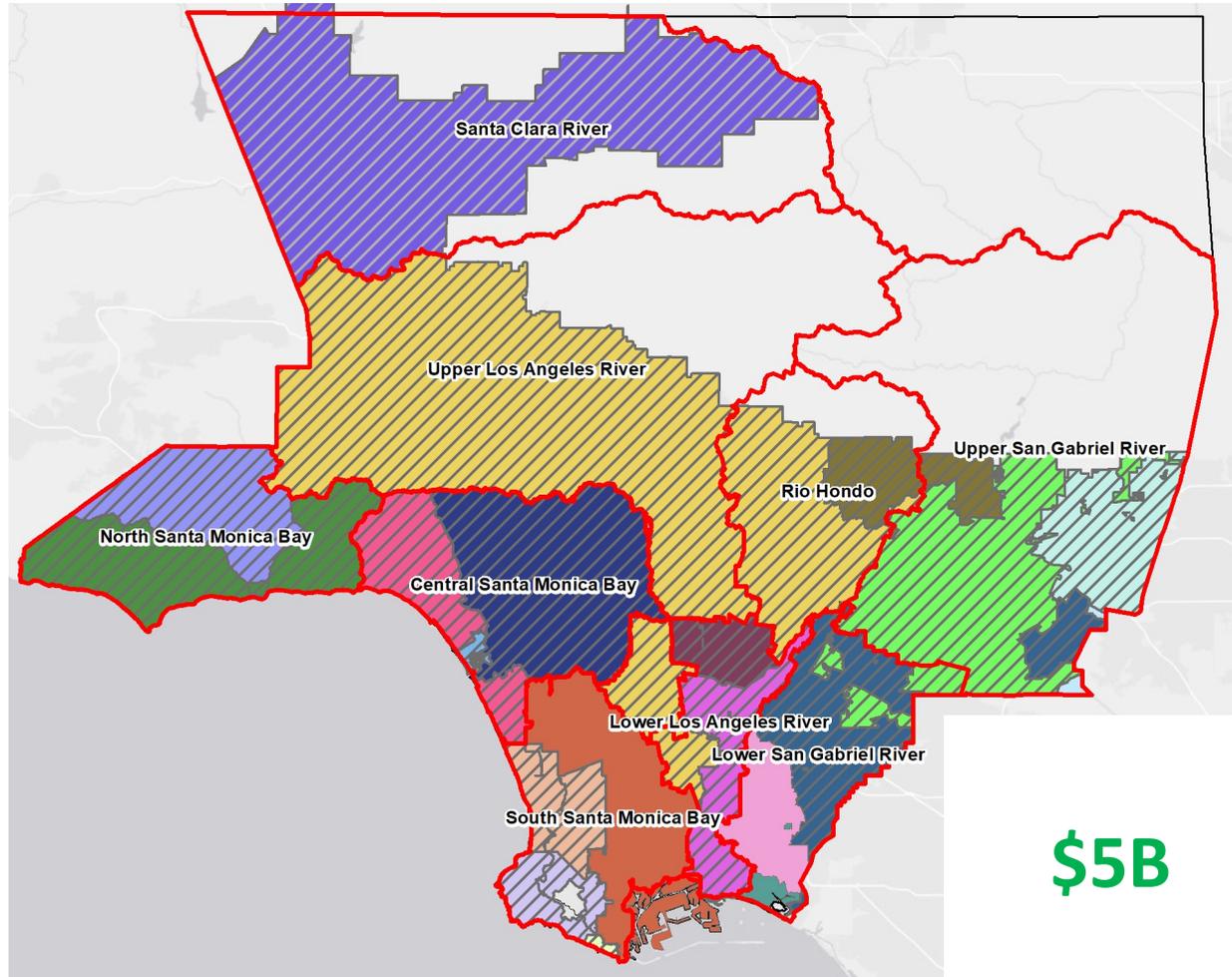
Study Overview

- 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

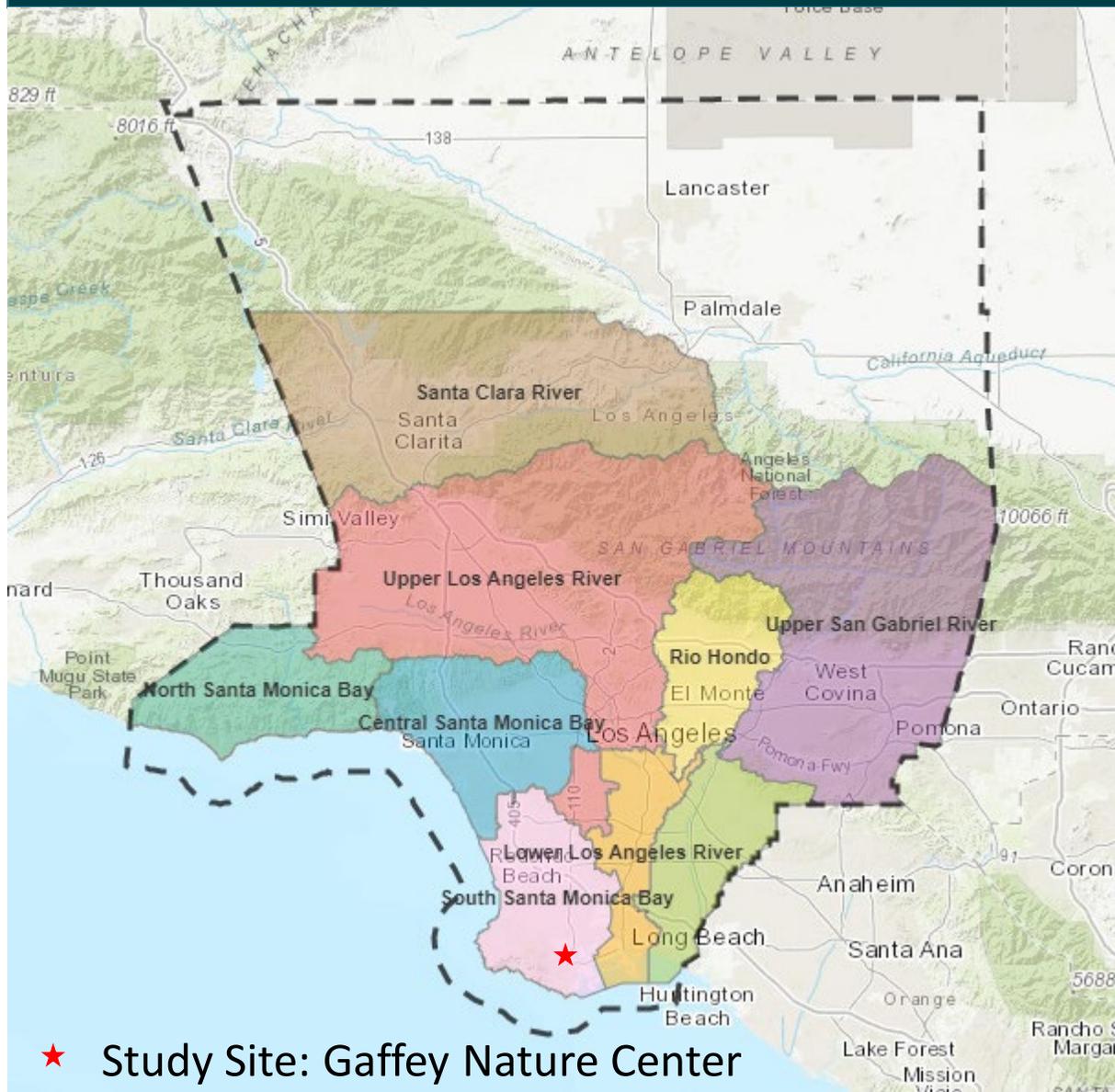
This study aims to optimize:

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

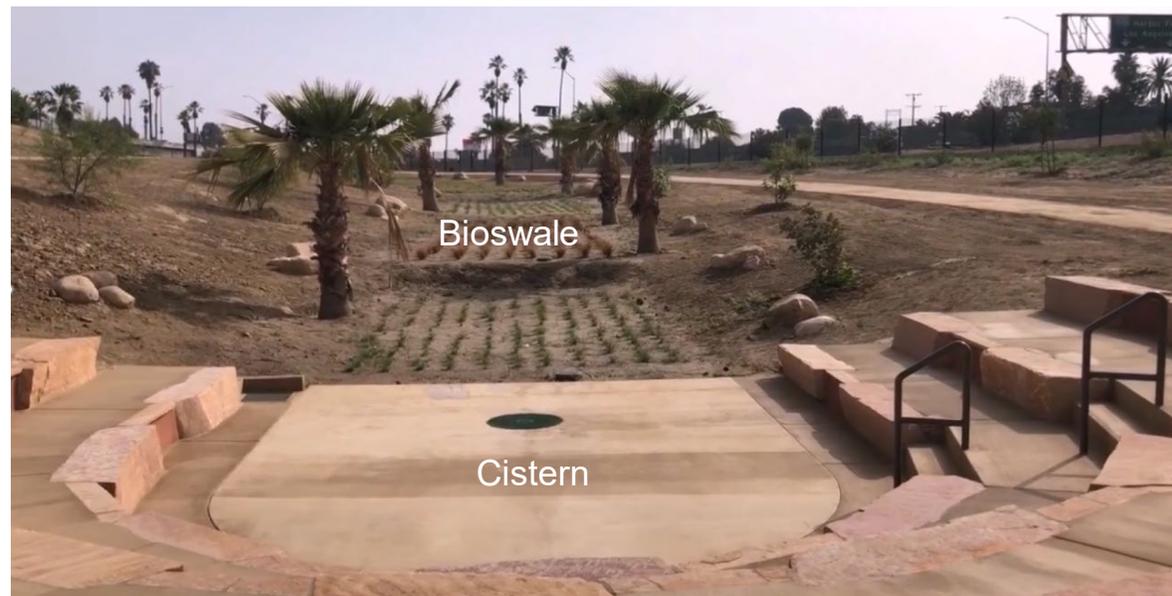




The Gaffey Nature Center

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





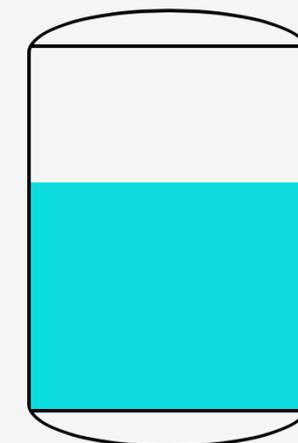
The Gaffey Nature Center

Site incorporates

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



110-Gaffey WaterSilo



7.52
feet



The Gaffey Nature Center

Site incorporates

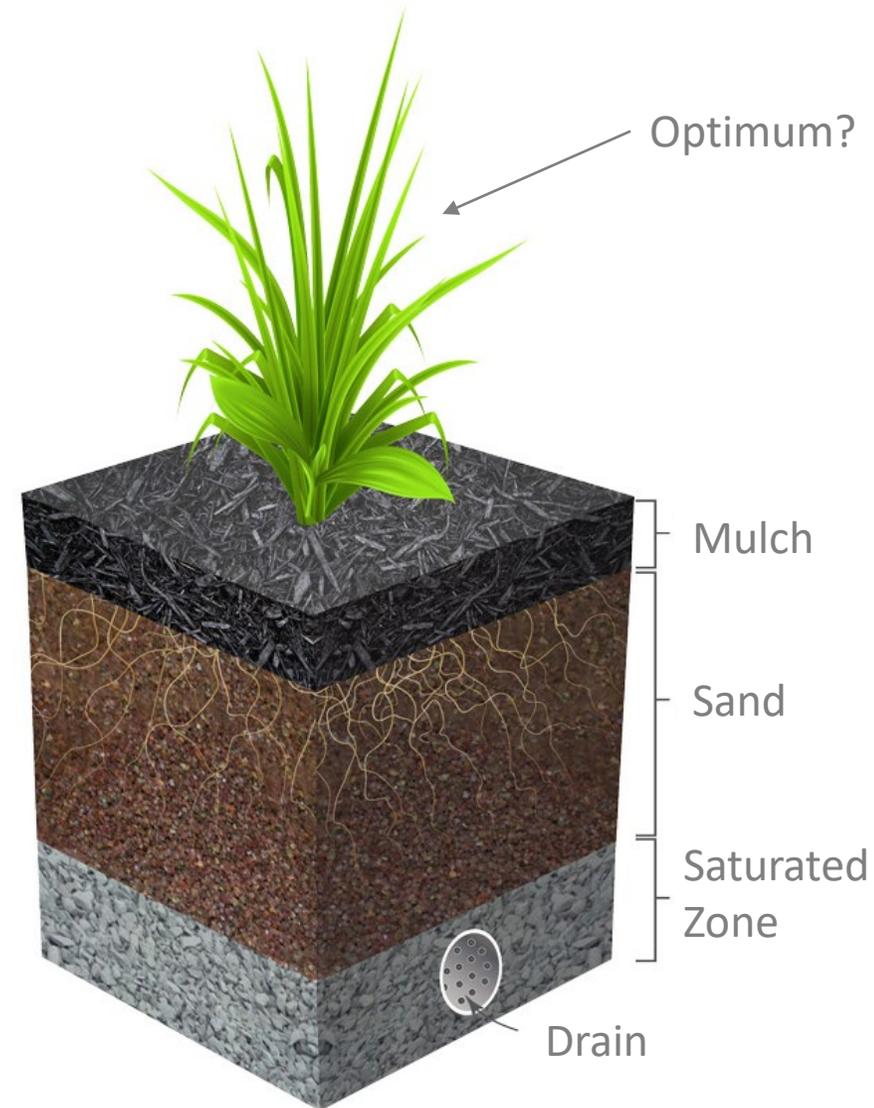
- Outdoor amphitheater and educational signage
- Experimental plots with CA-native BMP grass varieties
- Basic infrastructure for research and public involvement





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?



Liberty Canyon Road Green Improvement

Funding Program (Infrastructure Program)

Fiscal Year 2022-2023

North Santa Monica Bay Watershed Area

County of Los Angeles

Josafat Flores, P.E.



Project Overview

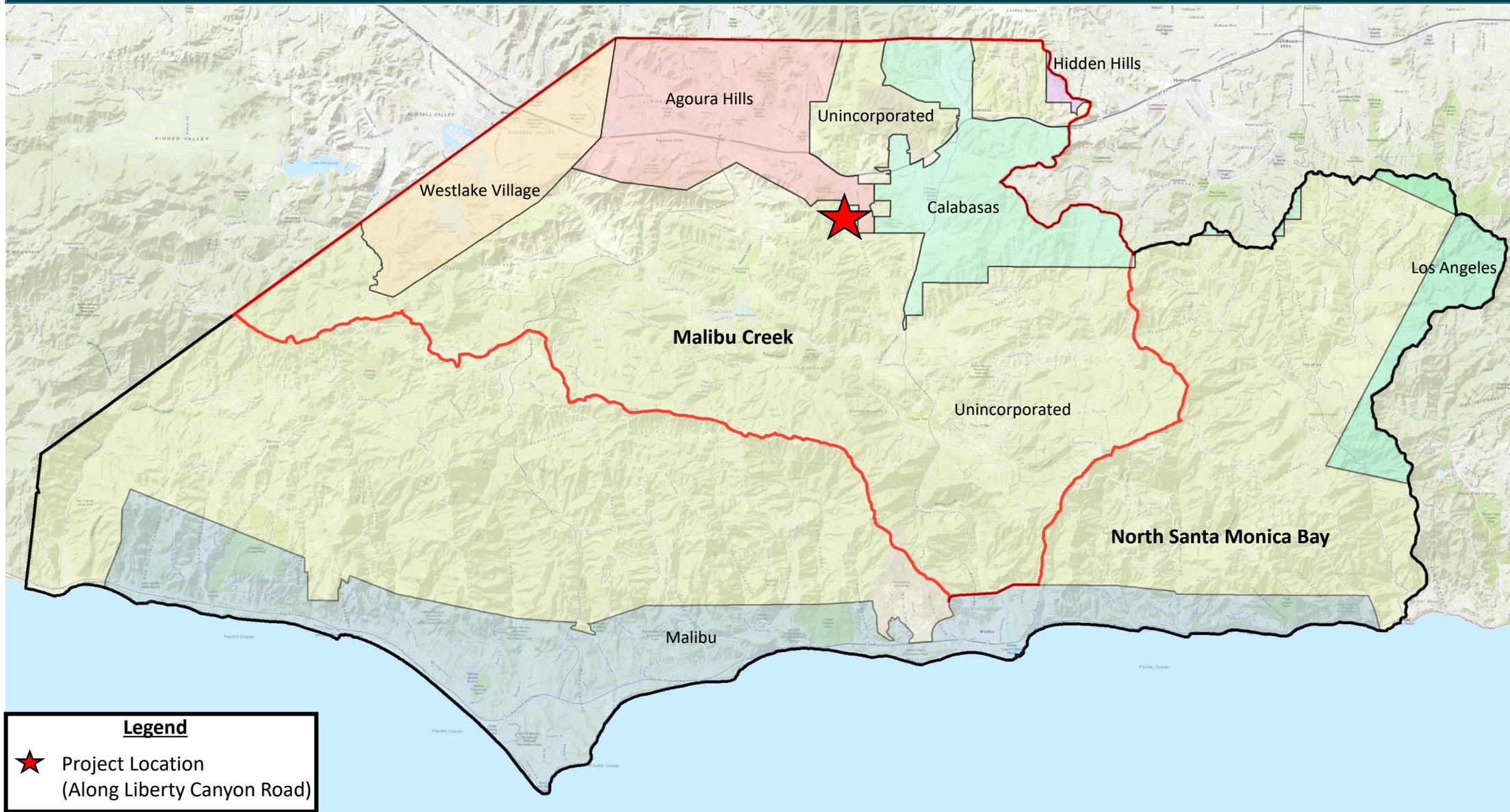
The proposed Project located in the unincorporated community of Agoura Hills will improve water quality and provide community enhancements.

- **Primary Objective:** Water Quality
- **Secondary Objectives:** Community Investment
- **Project Status:** Planning
- **Phases for which SCW funding is being requested:** Design Phase
- **Total Funding Requested:** \$100,000





Project Location

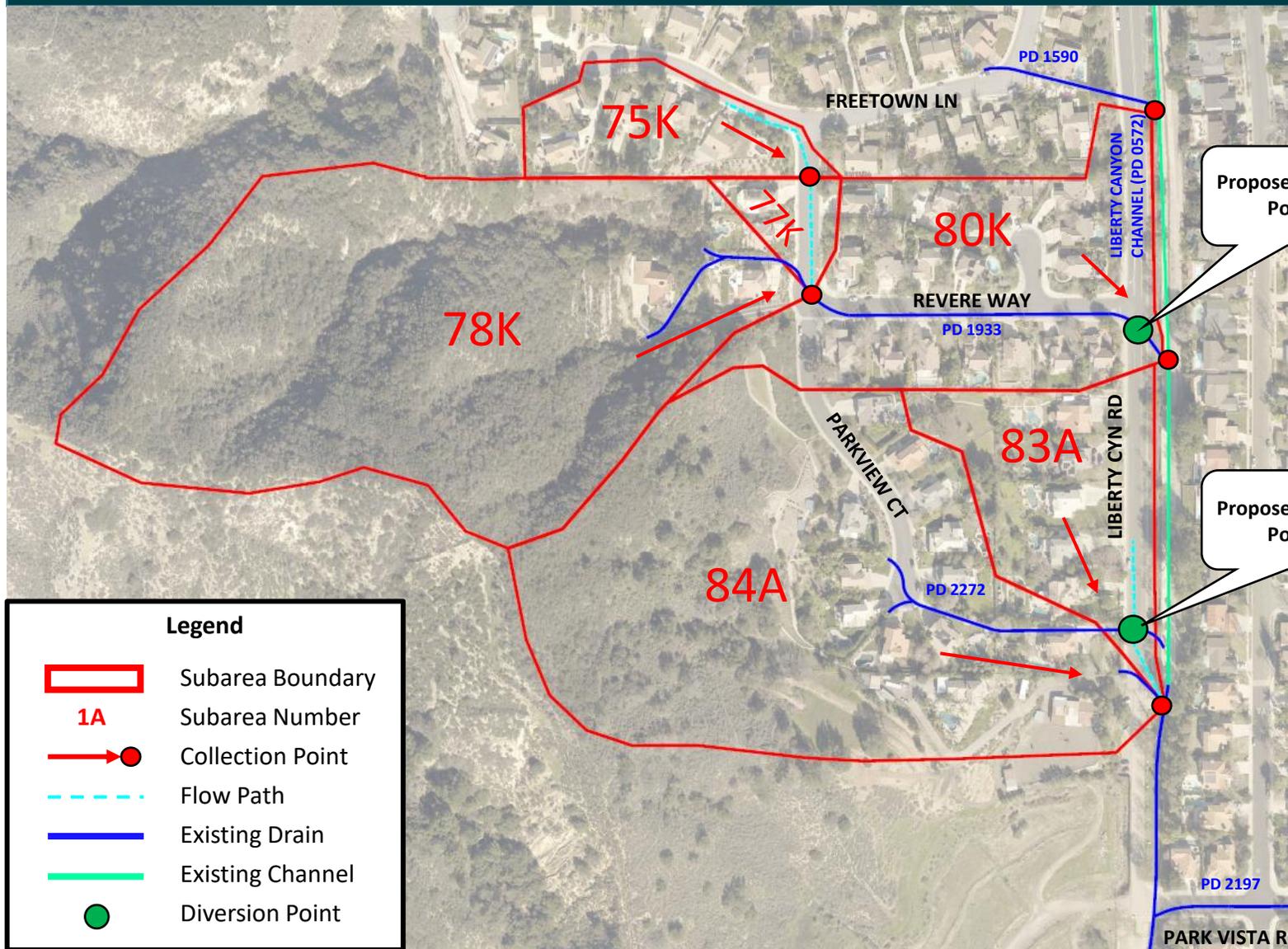




Project Background

• Project background:

- County Green Street Master Plan
- Malibu Creek Watershed Enhanced Watershed Management Program (EWMP)





Project Background



NORTH



Benefits

Improved Water Quality

- Protect beneficial uses of the receiving waters
- Reduction of target pollutants

Community Enhancements

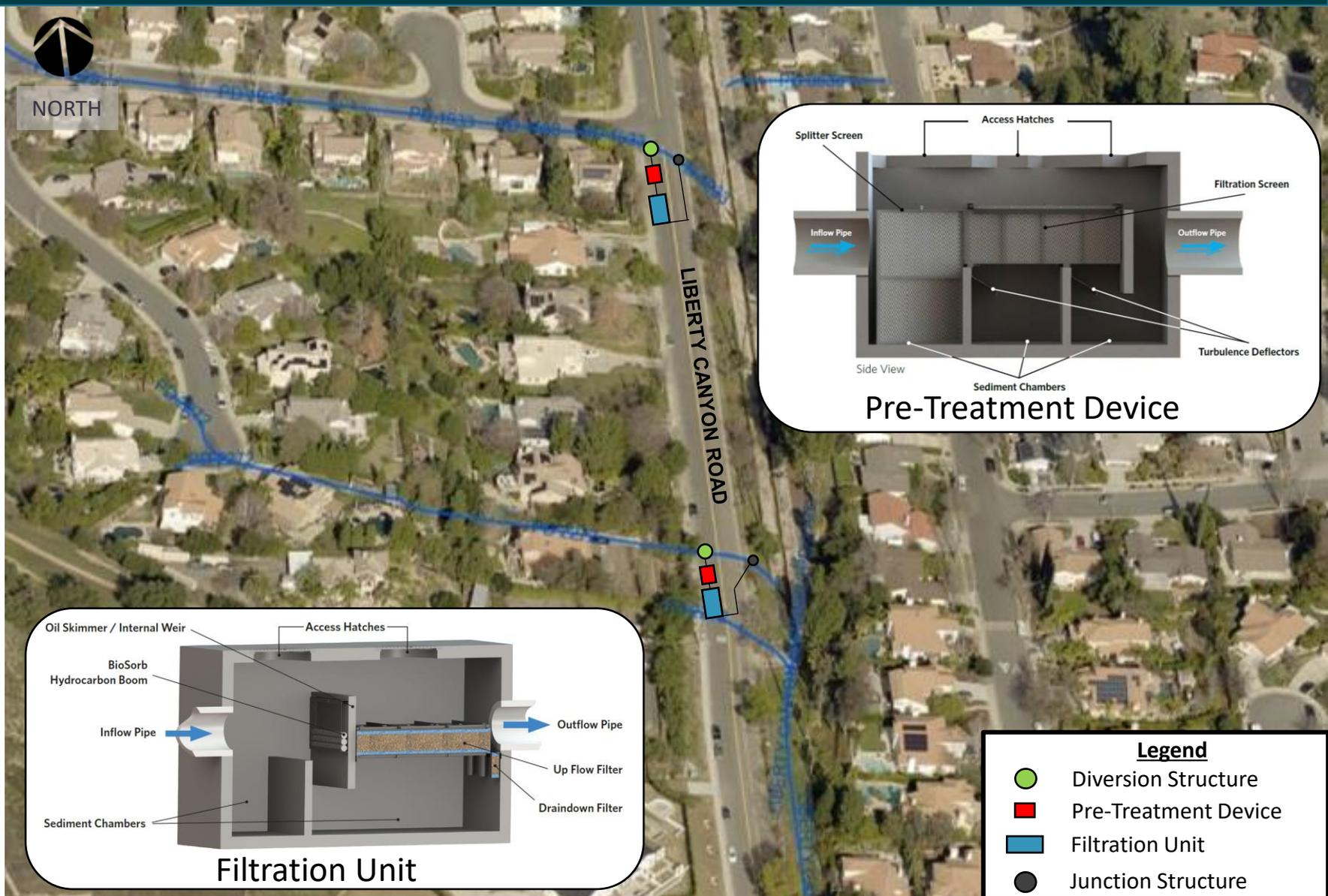
- Creates habitat & Recreational opportunities
- Reduce heat island effect
- Increase number of trees/vegetation



Project Details

Details

- Improved water quality
- Pre-Treatment Devices
- Filtration Units
- Potential to capture and treat up to 0.9 acre-feet of stormwater runoff

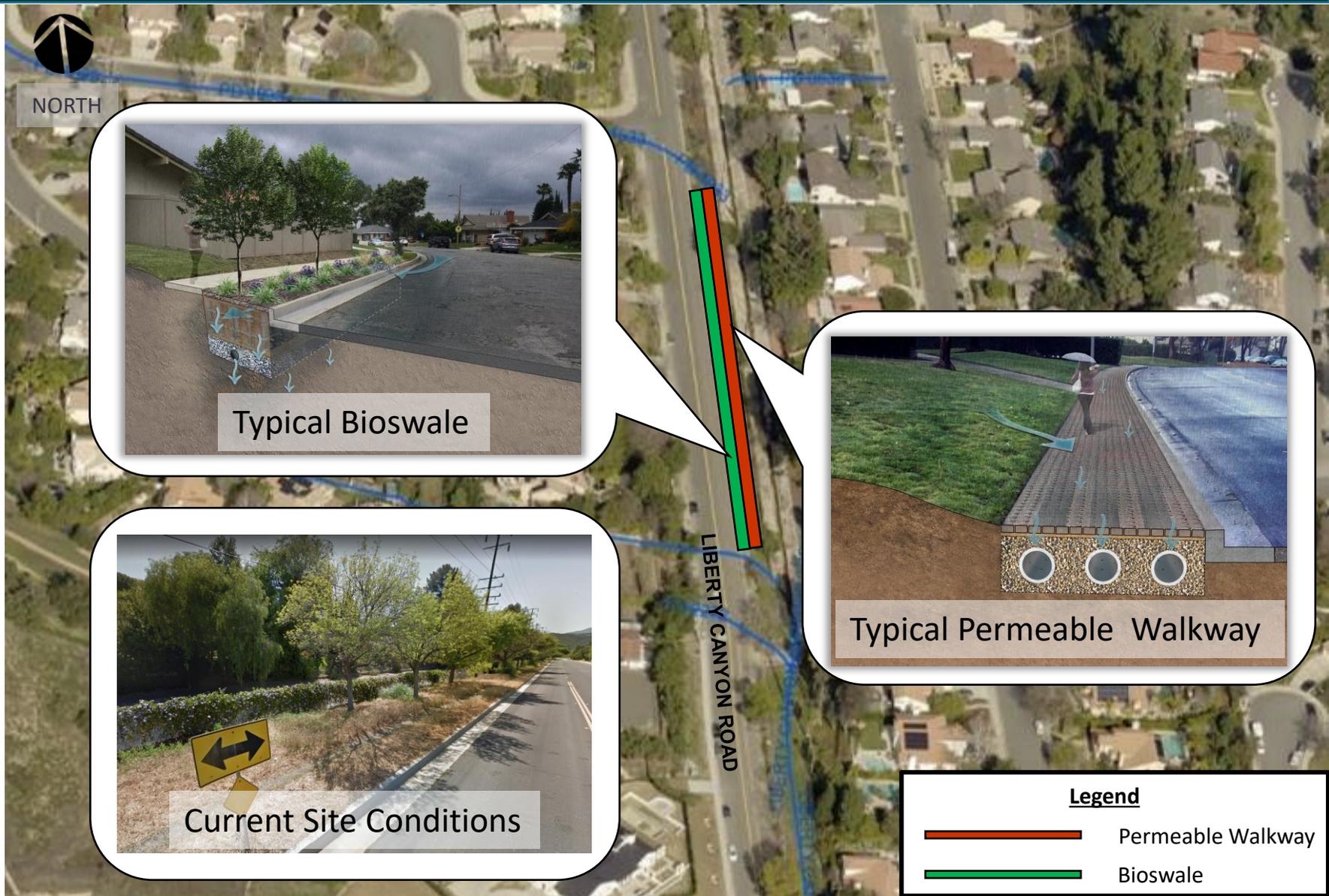




Project Details

Details

- Nature-based Solutions
 - Bioswale
 - Potential up to 27 Trees
 - Native/ Drought Tolerant Landscaping
- Pervious Walkway





Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Development of a Project Concept Report, including 30% plans	\$ 250,000	Late 2021
Design	Develop 60%, 90%, and Final Plans, Specifications and Estimates	\$ 150,000	Late 2022
Construction	Award contract and construction implementation	\$ 900,000	Early 2025
TOTAL		\$ 1,300,000	

Annual Cost Breakdown

Annual Cost:	\$ 76,000
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- Project Lifespan: 50 years
- Lifecycle Cost: \$3.1M



Funding Request

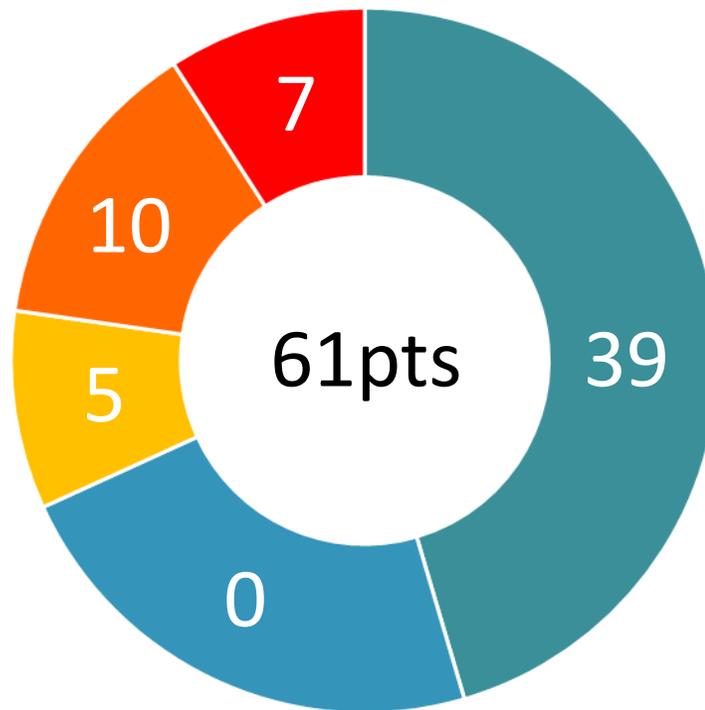
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$100,000.00	Design	Complete 60% design plans, 90% design plans, and Final plans, Specifications and Estimates.
TOTAL	\$100,000.00		

- Leveraged Funding amount: \$50,000 (33.33%)
- Future SCW Funds: Construction



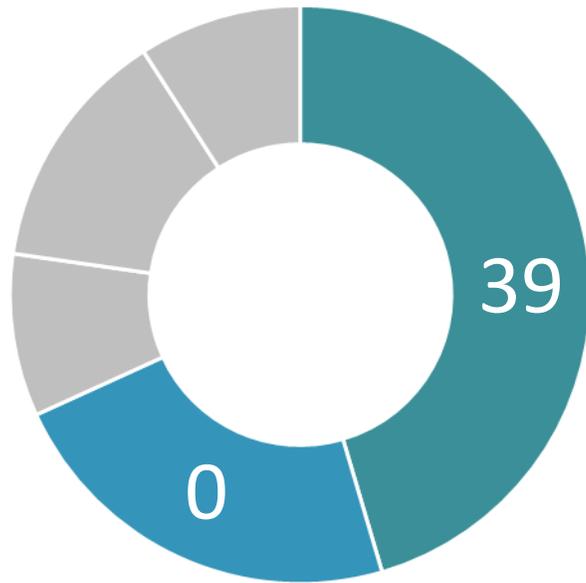
Preliminary Score

- Water Quality
- Water Supply
- Community Investment Benefits
- Nature Based Solutions
- Leveraged Funds and Community Support





Water Quality & Water Supply Benefits



■ Water Quality

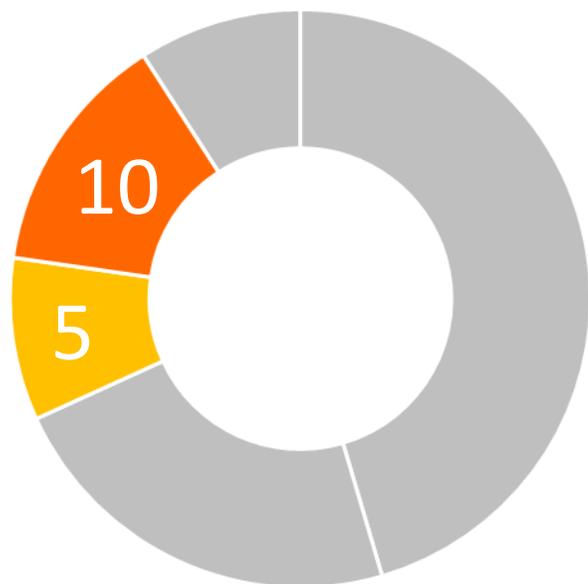
■ Water Supply

- **Water Quality Benefits**

- Project will divert and treat wet weather runoff via:
 - Diversion Structures
 - Pretreatment Devices
 - Flow Through Treatment Systems
- Tributary Area = 41.8 Acres
- Capacity = 0.9 Acre-Feet (85th percentile, 24-hour storm)
- Pollutant Reduction (Nutrients & Toxins)
- Project also has the capacity to also reduce:
 - Trash
 - Sediment



Community Investment Benefits and Nature Based Solutions



■ Community Investment Benefits

■ Nature Based Solutions

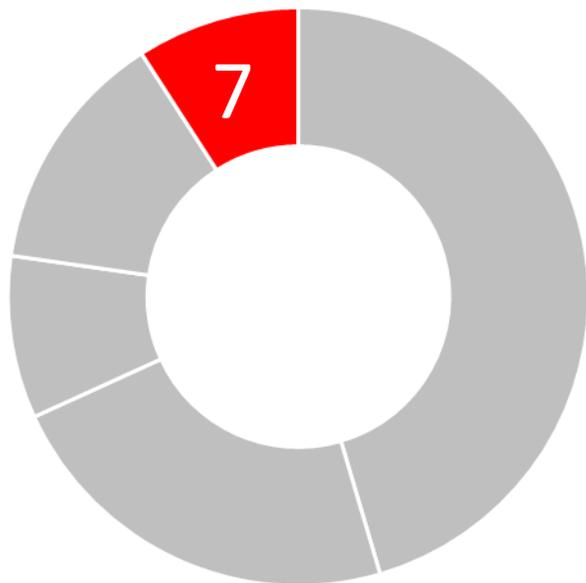
- **Community Investment Benefits**
 - Creates habitat & Recreational opportunities
 - Reduce Heat Local Island Effect
 - Increase shade by planting trees
- **Nature Based Solutions**
 - Through the implementation of:
 - Bioswales
 - Potential up to 27 Trees
 - Native/Drought Tolerant Planting
 - Permeable Walkway



Leveraging Funds and Community Support

- **Leveraging Funds**

- \$50,000
- 33.33% funding matched
- General fund, Grants, SCW municipal funds



■ Leveraged Funds and Community Support



Leveraging Funds and Community Support



- **Community Support**
 - Community Outreach
 - July 15, 2021 – On-Site Community Meeting
 - September 23, 2021- NSMB Watershed Community Meeting
- Outreach Plan
 - Information sessions Hosted websites
 - Mailers and/or social media engagements



Questions?