

# Safe, Clean Water Program

## Central Santa Monica Bay

### Watershed Area Steering Committee (WASC)

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#### **Meeting Minutes:**

Monday, March 1, 2021

10:00 AM – 12:00 PM

WebEx Meeting

#### **Attendees**

##### Committee Members Present:

E.J. Caldwell (West Basin MWD)

Art Castro\* (LADWP)

Sheila Brice (Los Angeles Bureau of Sanitation)

Rita Kampalath (LA County CEO)

Gloria Walton (The Solutions Project)

Charles Herbertson (Culver City)

Liz Crosson (Los Angeles)

Josette Descalzo (Beverly Hills)

Bruce Hamamoto (LA County)

Curtis Castle (Santa Monica)

Bruce Reznik (LA Waterkeeper)

Alysen Weiland\* (PSOMAS)

Darryl Ford\* (LA Rec & Parks)

Rafael Prieto

Cung Nguyen (LACFCD)

##### Committee Members Not Present:

Max Podemski

\*Committee Member Alternate

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

#### **1. Welcome and Introductions**

Liz Crosson, the Chair of the Central Santa Monica Bay WASC, welcomed the WASC and called the meeting to order.

Kirk Allen (District) discussed WebEx features and facilitated the roll call of the WASC. All WASC members made self-introductions and a quorum was established.

#### **2. Approval of Meeting Minutes from February 18, 2021**

The District provided a copy of the meeting minutes from February 18, 2021. Liz Crosson asked the WASC for comments or revisions. A motion to approve the February 18, 2021 was made by Gloria Walton and seconded by Bruce Reznik. (14 Approved and 1 Abstained, see Vote Tracker sheet).

#### **3. Public Comment Period**

No comments received.

#### **4. WASC and District Updates**

Kirk Allen provided the District updates, noting:

- First Annual Plans are being posted on the SCW Program website and over half of the cities have received their local returns. Cities that did not return their executed Transfer Agreements (TA) were requested to return them as soon as possible. Second Annual Plans are due in April.

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- An interactive web-based Stormwater Investment Plan (SIP) planning tool is in development and will be introduced in March 2021. District stated the goal of completing SIP programming by late April/early May.
- Selected Watershed Coordinators (WC) for CSMB WASC are Steve Groner and Associates and Heal the Bay; their Letters of Intent and insurance requirements are being reviewed.
- District is advancing 14 of 16 Technical Resource Program (TRP) project concepts to Technical Assistance Teams to develop Feasibility Studies. The Edward Vincent Jr. Project is the only TRP project concept for the CSMB WASC.
- Tax relief applications are due May 1, 2021. Low-Income Senior-Owned (LISO) properties are eligible for a full exemption of the SCWP tax if they meet the minimum income and age threshold. Also, there is a tax credit program for property owners who have invested in storm water management infrastructure on their property.

#### **5. Discussion Items:**

##### **a) Ex Parte Communication Disclosures**

Bruce Reznik noted he attended meetings with Our Water LA and Supervisor Kuehl on topics not specific to the agenda.

Bruce Hamamoto noted that his staff shares information with him in their monthly meetings regarding Watershed Projects.

Josette Descalzo noted he received project information at the Ballona Creek Watershed Management Group meetings.

##### **b) Presentations for Scientific Studies Program (SCW Portal)**

i) Regional Pathogen Reduction Study – Gateway Water Management Authority. Presented by Richard Watson.

Josette Descalzo asked for examples of the human risk assessment that will be a part of this study and what happens if other WASCs do not support the Project. Richard Watson indicated that similar work has been conducted on surfer health in the San Diego region. Also, research is being conducted by Stanford, US EPA, SCWRP, and University of Queensland on various pathogens. Richard Watson noted that a minimum of 5 WASCs would need to be involved and that reduced support means that the study area would be smaller.

SCWRP will provide scientific summaries to the WASC's at the April meeting.

ii) Fecal source markers and pathogens in water along Ballona Creek and at two impaired beaches in Los Angeles – Professor Jennifer Jay. Presented by Megyn Rugh and Marisol Cira.

Bruce Hamamoto inquired about comparative data on MRSA infection rates for the general public versus surfers. Megyn Rugh replied that the data shows that wet weather surfers were more likely to be colonized and CDC data shows that about 1% of American population is colonized by MRSA. The study stopped early due to COVID-19 and may have impacted the results.

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Josette Descalzo asked if additional funding would be needed to pay for permits to enter LACFCD right of way. Megyn Rugh indicated that they do not need additional funding and that the Surfrider Foundation is funding the sampling but would need to investigate the upstream permitting issues.

#### **c) Central Santa Monica Bay (CSMB) Project Prioritization and Selection Discussion for populating the Fiscal Year 2021-22 Stormwater Investment Plan**

The District provided a brief overview of the CSMB funding candidates via the SCW website portal. There are 8 infrastructure projects, 2 scientific studies, and 1 technical resource project. The interactive SIP tool is not ready for use and should be ready by the next meeting. Partial funding guidance is available for review.

Charles Herbertson asked for clarification on the costs for the Regional Pathogen Study. The District noted the application includes 9 WASC's and that the costs would need to be split between them. Richard Watson mentioned that there is a breakdown of costs in the scientific summary.

Josette Descalzo asked if the LACFCD had any guidance on how to assess the eligibility of projects for Measure W funding. The District noted that the projects go through LACFCD to receive a conceptual approval letter. Cung Nguyen confirmed that infrastructure applicants reach out to LACFCD for conceptual approval and that he would provide more information on approvals in the next meeting.

Bruce Reznik asked if there were any changes besides the Partial Funding Guidance. The District indicated that the only new document is on partial funding. Guidance on Community Engagement and Disadvantaged Communities will be ready for round 3 of SIP projects.

#### **6. Public Comment Period**

No Public Comments received.

#### **7. Voting Items**

None.

#### **8. Items for Next Agenda**

#### **9. Adjournment**

Liz Crosson thanked the WASC members and public for their time and participation and adjourned the meeting. Next meeting Thursday March 18, 2021, 10:00 am – 12:00 pm.

CENTRAL SANTA MONICA BAY WASC MEETING - March 1, 2021						
Member Type	Organization	Quorum Present			Voting Item	
		Member	Voting?	Alternate	Voting?	Meeting Minutes 02/18/21
Agency	LACFCD	Cung Nguyen	x	Marcela Benavides		A
Agency	West Basin MWD	E.J. Caldwell	x	Alex Heide		Y
Agency	LA Water & Power	Delon Kwan		Art Castro	x	Y
Agency	LA Sanitation District	Sheila Brice	x	Michael Scaduto		Y
Agency	LA Recreation & Parks	Cathie Santo Domingo		Darryl Ford	x	Y
Community Stakeholder	LAC Chief Sustainability Office	Rita Kampalath	x	Gary Gero		Y
Community Stakeholder	Lipa Consulting Company / Business Sector	Jacob Lipa		Alysen Weiland	x	Y
Community Stakeholder	The Solutions Project / SCOPE	Gloria Walton	x	Gloria Medina		Y
Community Stakeholder	LA Waterkeeper	Bruce Reznik	x	Kim Martin		Y
Community Stakeholder	VACANT					
Municipal Members	Beverly Hills / West Hollywood	Josette Descalzo	x	Hany Demitri		Y
Municipal Members	Culver City	<b>Charles Herbertson</b>	x	Kim Braun		Y
Municipal Members	Los Angeles	Max Podemski		Ackley Padilla		
Municipal Members	Los Angeles			Rafael Prieto	x	Y
Municipal Members	Los Angeles	<b>Liz Crosson</b>	x	Susie Santilena		Y
Municipal Members	LAC Public Works	Bruce Hamamoto	x	Armando D'Angelo		Y
Municipal Members	Santa Monica	Curtis Castle	x	George Rodriguez		Y
Total Non-Vacant Seats		15			Yay (Y)	14
Total Voting Members Present		15			Nay (N)	0
Agency		5			Abstain (A)	1
Community Stakeholder		4			Total	15
Municipal Members		6				Approved

Other Attendees	
Alysha Chan	Lauren Amimoto
Aric Torreyson	Lorena Matos
Armando D'Angelo	Marisol Cira
Brenda Ponton	Megyn
Brett Perry	Melanie Rivera
Chanel Kincaid	Michael Gagan
Conor Mossavi	Richard Watson
Danielle Chupa	Ryan Jackson
George Rodriguez	Sean Singletery
Hany Demitri	Shahram Kharaghani
Ilene Ramiez	Susie Santilena
Jared Ervin	Carlos Moran
Johanna Chang	Shahriar Eftekhazadeh
Karen Lee	Jacob Aube
Katie M	Sarai Bhaga
Ken Susilo	
Kim Braun	

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# Overview of Pathogen Reduction Study

Presented by Richard Watson, Richard Watson & Associates, Inc. (RWA)

Project Lead: Gateway Water Management Authority

Presentation to the Central Santa Monica Bay WASC

01 March 2021

# Summary of Study

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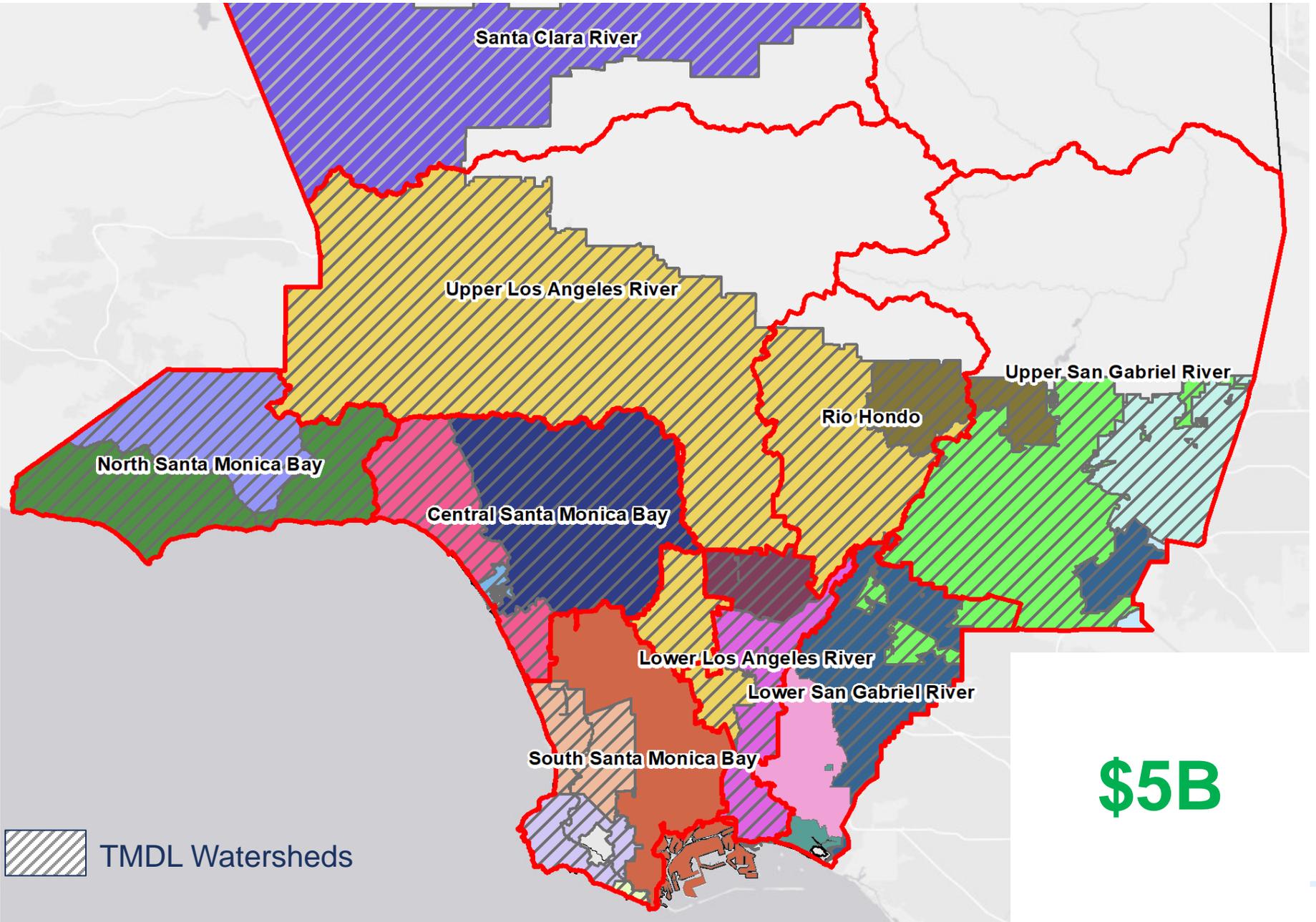
- This Study aims to use the latest available science to measure water-borne pathogens across watersheds. It will help identify key sources of human health risk, and develop cost-effective protective strategies
- USEPA and academia agree not all sources of bacteria are equally risky, but we do not have the information we need to focus limited resources on the riskiest sources first.
- Objectives of Study
  - Leverage recent USEPA, academic, and stakeholder driven research
  - Produce strategies for incorporation into Program Plans
  - Support informed decisions that help us protect more people sooner

# Study Overview

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- 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 could reduce need to capture stormwater for bacteria compliance purposes while improving the protection of human health
  - Study may lead to partnering with various parties, such as wastewater agencies and homeless services agencies, to address human sources of pathogens.

# Study Location



# Scientific Study Details

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## *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)

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## *Expected Outcomes*

- Completion of a needed regional study in LA County to identify the sources of pathogens and the most effective BMPs to address them. Studies have been completed elsewhere identifying human sources of pathogens as the highest driver of risk to human health.
- The latest science will be used to support the reduction of human pathogens and protect human health.
- Combined with scientific advancements, the results will provide an opportunity to improve the current bacteria strategy using source-specific indicators, improved viral detection methods, and risk modeling frameworks.
- The study results will facilitate meaningful, appropriate, productive actions by Permittees that will effectively reduce human health risks.

# Scientific Study Details (Continued)

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## *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

# Scientific Study Details (Continued)

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- *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 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

# Cost & Schedule

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Phase	Description	Cost	Schedule
Task 1	Stakeholder Process	\$484,000	7/21 – 6/26
Task 2	Health Risk Assessment	\$5,816,208	7/21 – 9/25
Task 3	Risk Management	\$1,702,100	4/22 – 3/26
Task 4	Application of Study Findings	\$484,000	1/25 – 6/26
<b>TOTAL</b>		<b>\$8,486,308</b>	

# Funding Request

WASC	Year 1	Year 2	Year 3	Year 4	Year 5
CSMB	\$45,659	\$333,041	\$322,298	\$319,612	\$53,716
LLAR	\$32,801	\$239,256	\$231,539	\$229,609	\$38,590
LSGR	\$42,810	\$312,259	\$302,186	\$299,668	\$50,364
NSMB	NA	NA	NA	NA	NA
RH	\$29,477	\$215,011	\$208,075	\$206,341	\$34,679
SCR	\$15,378	\$112,168	\$108,550	\$107,645	\$18,092
SSMB	\$47,156	\$343,964	\$332,869	\$330,095	\$55,478
ULAR	\$98,952	\$721,766	\$698,483	\$692,663	\$116,414
USGR	\$48,435	\$353,290	\$341,893	\$339,044	\$56,982
<b>TOTAL</b>	<b>\$360,668</b>	<b>\$2,630,755</b>	<b>\$2,545,893</b>	<b>\$2,524,677</b>	<b>\$424,315</b>

# Summary of Benefits

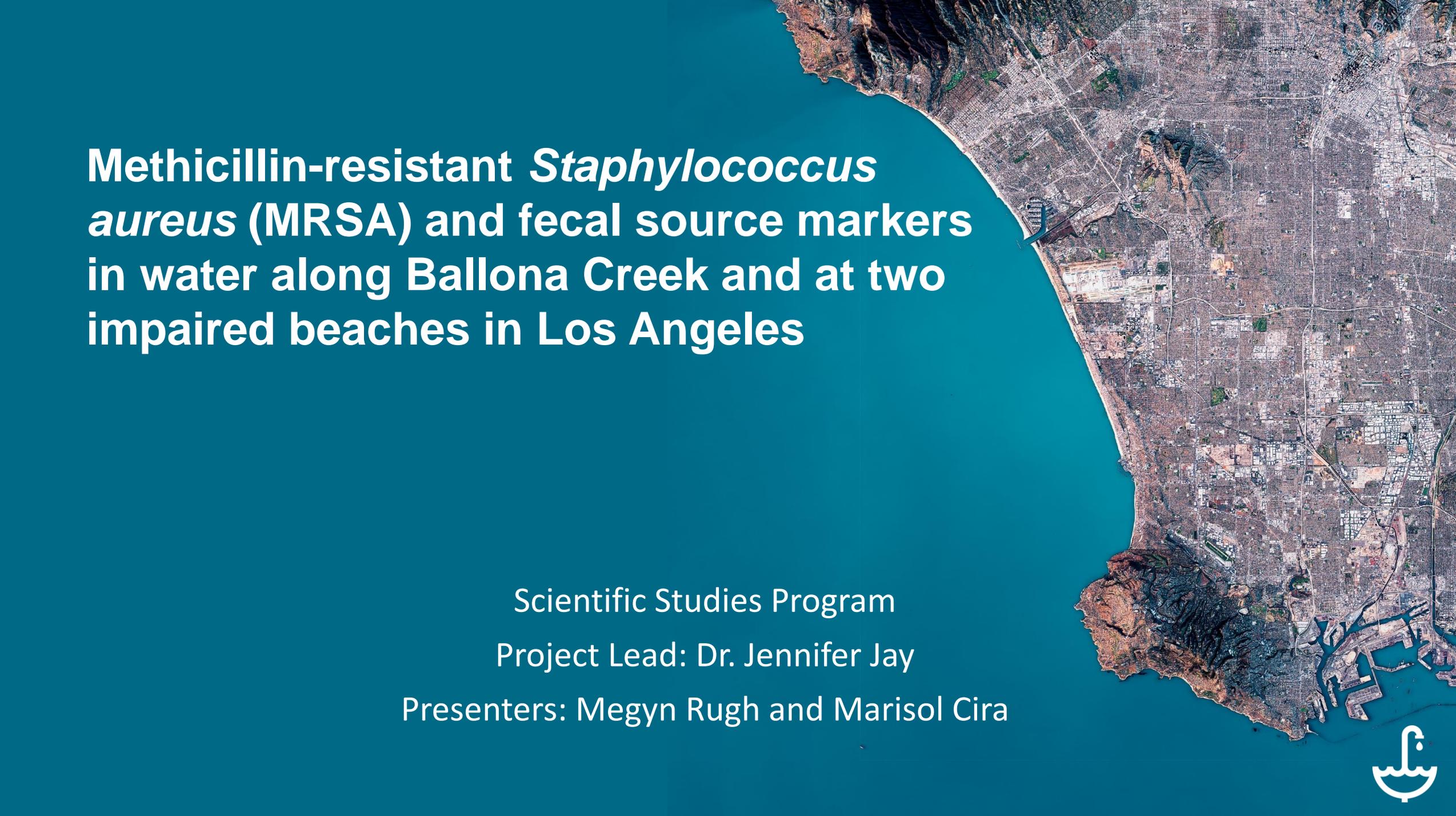
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- By developing a better understanding of pathogens present in the region's watersheds, the relative risk to human health they pose, and the effectiveness of various control measures, new or adapted BMPs can be established that improve water quality 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 and Thank You

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Richard Watson  
Richard Watson & Associates  
[rwatson@rwaplanning.com](mailto:rwatson@rwaplanning.com)  
(949) 394-8495

An aerial photograph of the Los Angeles coastline, showing the city grid, the Pacific Ocean, and the Ballona Creek area. The image is rotated 90 degrees clockwise.

# Methicillin-resistant *Staphylococcus aureus* (MRSA) and fecal source markers in water along Ballona Creek and at two impaired beaches in Los Angeles

Scientific Studies Program

Project Lead: Dr. Jennifer Jay

Presenters: Megyn Rugh and Marisol Cira



# Study Overview

This project involves characterization of fecal sources and pathogens (including MRSA) along the stem of BallonaCreek and at two impaired beaches.

This investigation will:

- 1) Yield greater understanding of the relationships between fecal indicator bacteria and pathogens and is
- 2) Reveal successful mitigation strategies and accurate risk assessment



## New National Estimate\*

Each year, antibiotic-resistant bacteria and fungi cause at least an estimated:



**2,868,700**  
infections



**35,900** deaths



*Clostridioides difficile*\*\* is related to antibiotic use and antibiotic resistance:



**223,900**  
cases

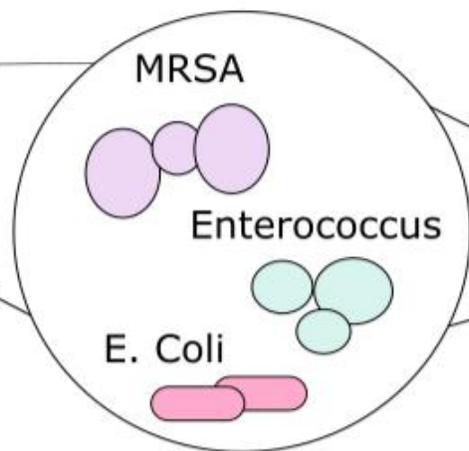


**12,800** deaths

ANTHONY  
D'ANGELO

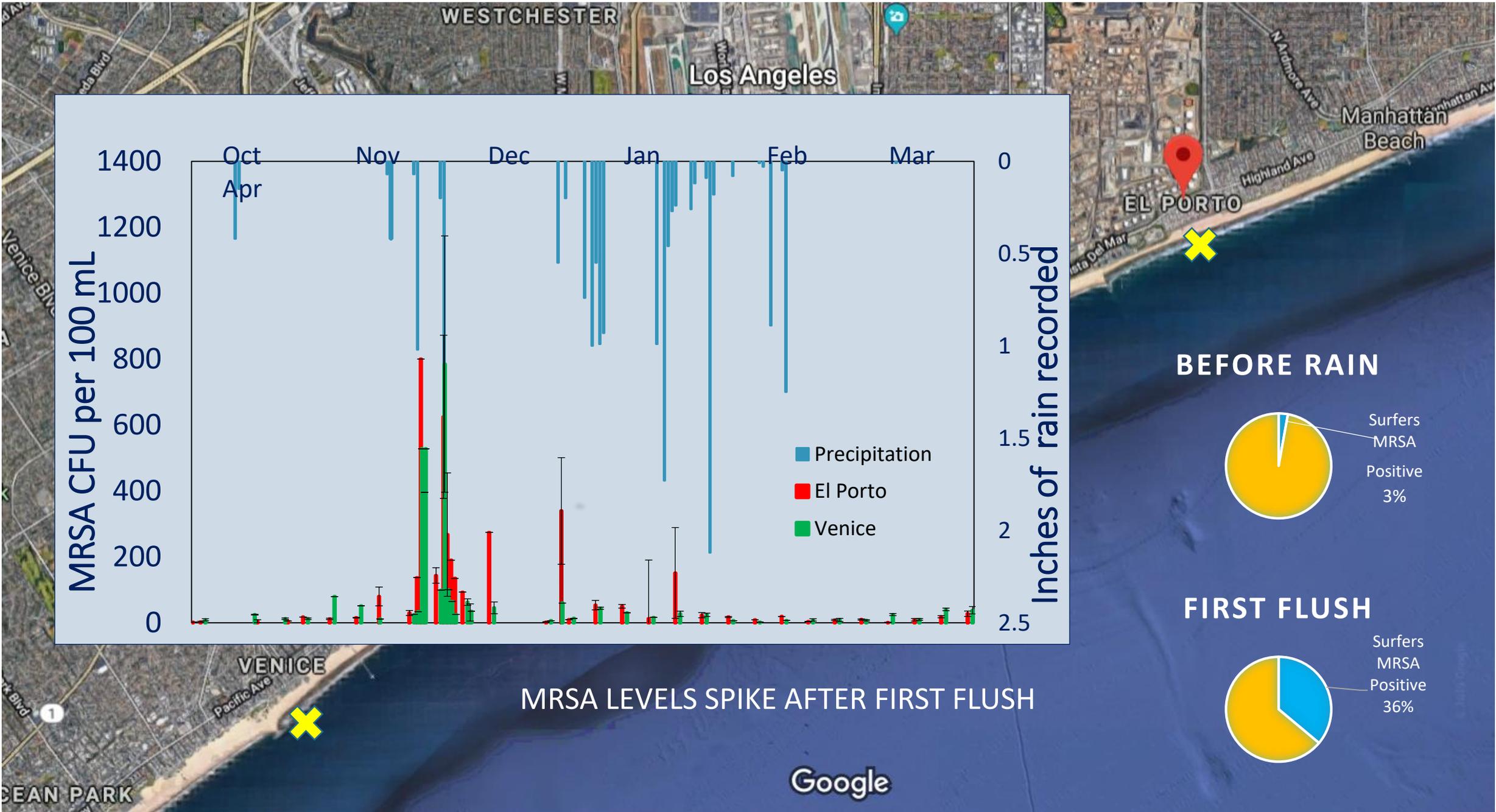
# Surfer Resistance Project

Storm runoff in southern California contaminates the ocean where surfers submerge themselves regularly

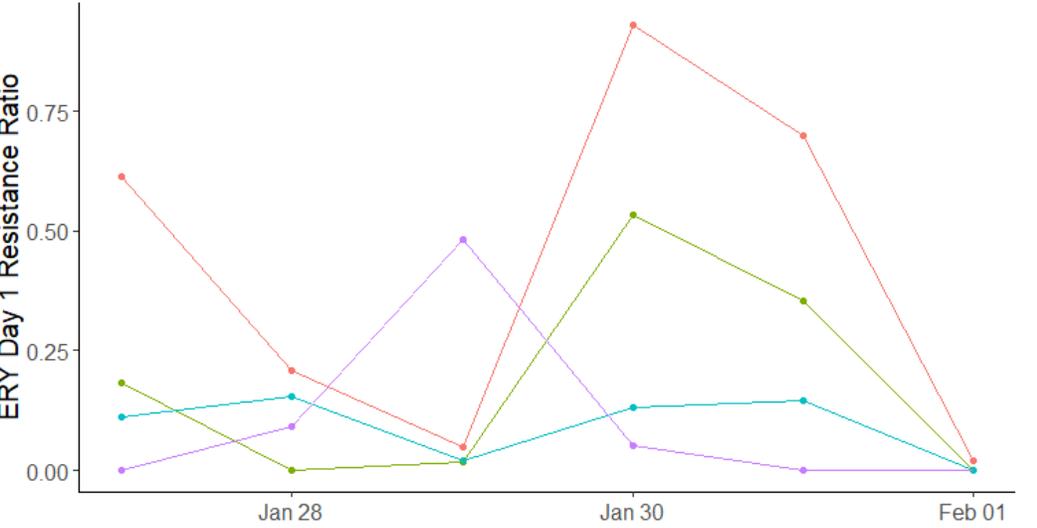
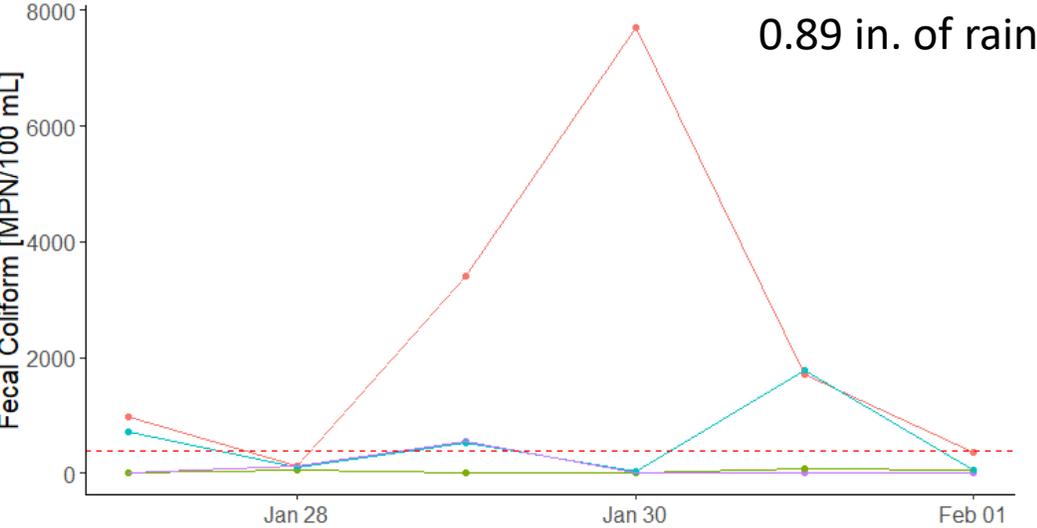


Nasal swabs from surfers and water sample collection reveal the colonisation of several harmful bacteria

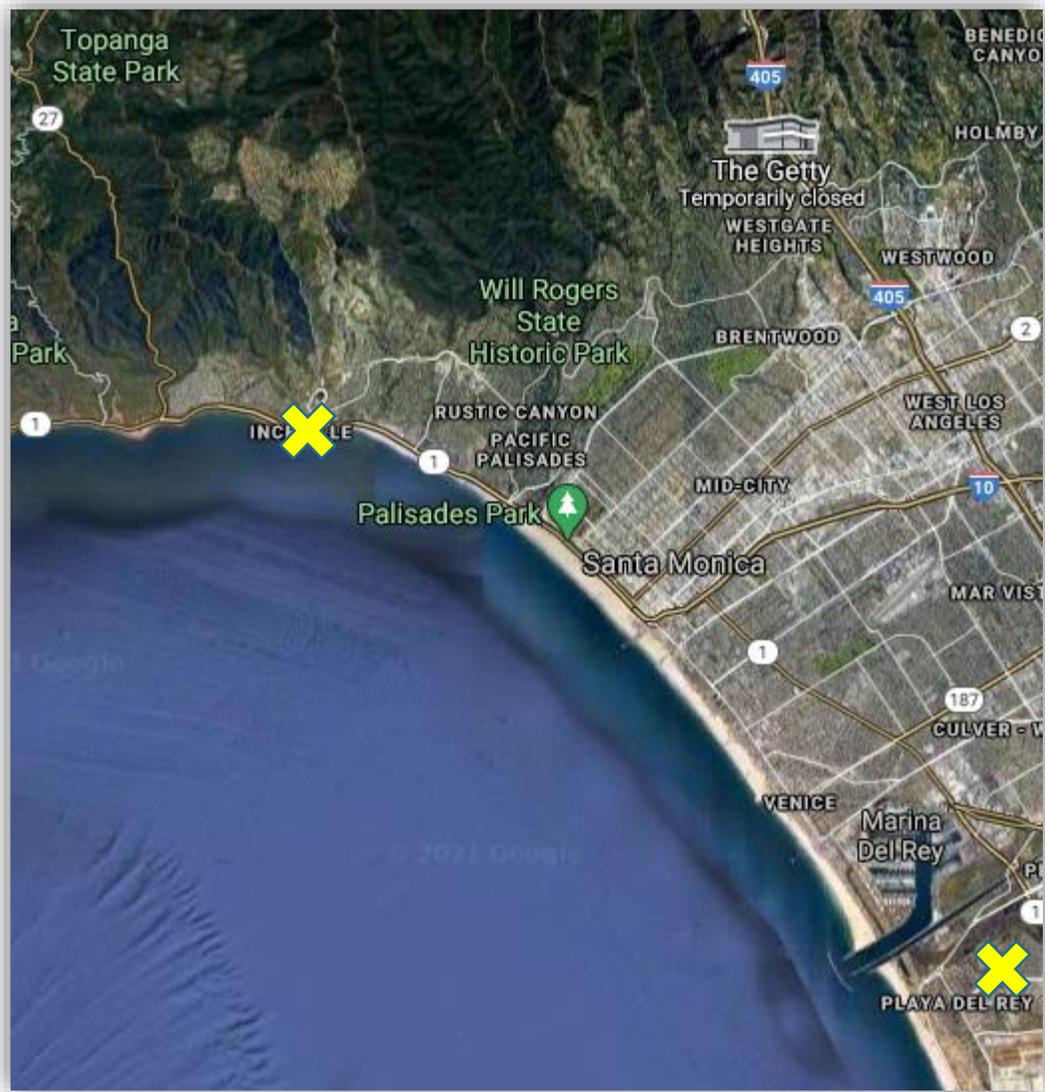




# Fecal Coliform Bacteria and Erythromycin Resistant Bacteria through a Rain Event



ballona creek topanga beach topanga creek venice beach





# Study Details

We propose to:

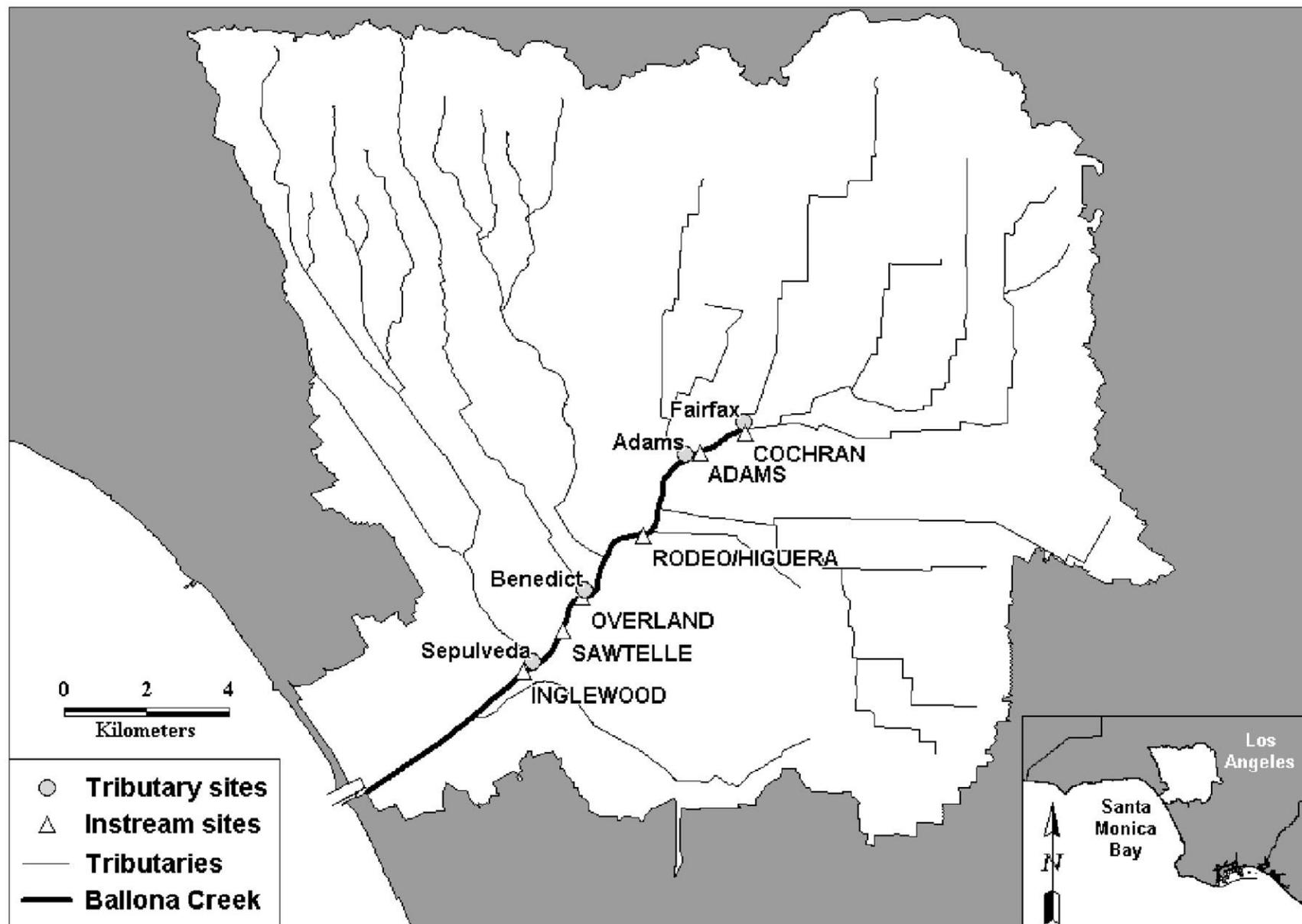
- 1) Conduct a limited source tracking project within Ballona Creek to identify traditional indicators of fecal pollution, human-associated fecal markers, and pathogens
- 2) Characterize MRSA colonies from surfers, ocean water, and creek water to determine sources and transport of MRSA within the watershed.





# Study Location

- Monthly sampling and adaptive sampling during wet-weather
- Parameters: *Escherichia coli*, Total coliform, Enterococci, HF183 (human-associated marker), Methicillin-resistant *Staphylococcus aureus*, *Salmonella*, *Campylobacter*, Vancomycin-resistant *Enterococcus*, eight antibiotic resistance genes: *sul1*, *sul2*, *bla<sub>SHV</sub>*, *bla<sub>TEM</sub>*, *emrF*, *ermB*, *tetL*, *tetW*





# Methods



New Ballona  
Creek  
sample  
collection



Existing  
MRSA  
isolates  
from surfers

## Molecular Methods

DNA Extraction, qPCR  
for ARGs, Whole  
Genome Sequencing



## Culture—based Methods

Antibiotic resistant  
pathogen detection





# Cost & Schedule

Description	Cost	Completion Date
UCLA PI, Postdoctoral, undergraduate salaries and benefits	\$210,604.00	09/30/2023
Project supplies: miscellaneous laboratory materials, and primers, probes, and reagents for qPCR, sequencing costs	\$67,772.00	05/15/2023
Travel	\$650.00	09/30/2023
Surfrider Foundation Sub-contract	\$34,700	02/15/2023
California Model Agreement for State of California agencies and UC campuses facilities and administrative costs	\$175,686.00	09/30/2023
<b>Total:</b>	<b>489,412.00</b>	



# Funding Request

## Funding Requested Per Year Per Watershed

Funding Request Year	Watershed Area	Amount for Year
Year 1	Central Santa Monica Bay	\$ 242,252.00
Total Year 1		\$ 242,252.00
Year 2	Central Santa Monica Bay	\$ 247,160.00
Total Year 2		\$ 247,160.00
Total Funding		\$ 489,412.00



# Summary of Benefits

- Surfrider Foundation is a partner on the project, both for involving community volunteers in water sampling and holding community meetings.
- An understanding of the role of Ballona Creek as a source of pathogens to local beaches will enable targeted mitigation efforts.





# Jay Lab @ Ucla



Questions  
?

