Meeting Minutes:
Monday, March 1, 2021
10:00 AM – 12:00 PM
WebEx Meeting

Attendees

Committee Members Present:
E.J. Caldwell (West Basin MWD)               Bruce Hamamoto (LA County)
Art Castro* (LADWP)                           Curtis Castle (Santa Monica)
Sheila Brice (Los Angeles Bureau of Sanitation) Bruce Reznik (LA Waterkeeper)
Rita Kampalath (LA County CEO)                Alysen Weiland* (PSOMAS)
Gloria Walton (The Solutions Project)         Darryl Ford* (LA Rec & Parks)
Charles Herbertson (Culver City)              Rafael Prieto
Liz Crosson (Los Angeles)                    Cung Nguyen (LACFCD)
Josette Descalzo (Beverly Hills)

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.
• 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)


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.
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

### Quorum Present

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| 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 |   |

**Meeting Minutes 02/18/21**

### 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 Singletary
- Hany Demitri: Shahram Kharaghani
- Ilene Ramiez: Susie Santilena
- Jared Ervin: Carlos Moran
- Johanna Chang: Shahrir Eftekharzadeh
- Karen Lee: Jacob Aube
- Katie M: Sarai Bhaga
- Ken Susilo: Kim Braun
Overview of Pathogen Reduction Study


Project Lead: Gateway Water Management Authority

Presentation to the Central Santa Monica Bay WASC

01 March 2021
Summary of Study

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

- 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.
Scientific 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)

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)

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)

- **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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# Funding Request

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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 and Thank You

Richard Watson
Richard Watson & Associates
rwatson@rwaplanning.com
(949) 394-8495
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
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

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

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.
MRSA LEVELS SPIKE AFTER FIRST FLUSH

MRSA CFU per 100 mL vs. Inches of rain recorded

- Precipitation
- El Porta
- Venice

Surfers MRSA Positive
- Before Rain: 3%
- First Flush: 36%
0.89 in. of rain

Fecal Coliform Bacteria and Erythromycin Resistant Bacteria through a Rain Event
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.
• 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*\text{SHV}, *bla*\text{TEM}, *emrF, ermB, tetL, tetW
Methods

Molecular Methods
- DNA Extraction, qPCR for ARGs
- Whole Genome Sequencing

Culture—based Methods
- Antibiotic resistant pathogen detection

New Ballona Creek sample collection
Existing MRSA isolates from surfers
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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