

Connecting with Nature through Citizen Science

Alison Young, California Academy of Sciences

Reid Bogert, Surfrider

Lisette Arellano, Golden Gate National Parks Conservancy

Suzanne Whelan, Marin Municipal Water District

Tuesday, April 20, 2021
9:00am-10:30am



Join the conversation on social media:
#WSC2021



VIRTUAL EVENT: APRIL 6, 13, 20, 27

PRESENTED BY:





Water Conservation Showcase

VIRTUAL EVENT: APRIL 6, 13, 20, 27

PRESENTED BY:



Safety Message

- **Egress**: two paths out in case first is blocked.
- Have “**Go**” **bag** prepared with essentials.
- Set up and rehearse **convening location** with family.
- **Duck and cover** in case of an earthquake.
- **Take ergonomic breaks.**
- Continue to regularly **wash hands** and where a **face mask** and keep **socially distant** in public.



Event Sponsors

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Outreach Partners

City of Santa Cruz Water Department | BAYWORK | California Water Efficiency Partnership | Garden for the Environment | Sonoma Water | San Francisco Department of the Environment Green Business Program | Sustainable Silicon Valley | Verdical Group | Wholly H2O | ReScape | San Francisco Bay Area Water for People Committee | California Department of Water Resources | Marin Municipal Water District & California Irrigation Institute | California Landscape Contractors Association | Association of Professional Landscape Designers | Alameda County Water District | Acterra | City of Palo Alto | Maddaus Water Management

Collect a code word on the Premium Exhibitor pages to be entered to win a raffle prize!

tinyurl.com/WCSexhibitor

Water Conservation Showcase

VIRTUAL EVENT: APRIL 6, 13, 20, 27

Virtual Exhibitor Packet

TO ENTER THE RAFFLE

1. Collect the 7 letters located on the Premium Exhibitor pages
2. Unscramble the 7 letters to spell a water-related word
3. Enter that word and your contact info at tinyurl.com/WCSraffle

Look for the letters!

Raffle prizes generously donated by:
High Sierra Showerheads, EBMUD, San Jose Water, Rain Bird, Lane Community College, and Richard Heath & Associates



Water Conservation Showcase 2021 Virtual Exhibitor Packet | Page 1

Premium Exhibitors



Standard Exhibitors

William J. Worthen Foundation
U.S. Green Building Council
Rain Bird
Gachina Landscape Management
BAWSCA
Lane Community College

Continuing Education Credits



LEED Professionals may self-report 10.5 continuing education hours TOTAL for 2021 WCS.

Log into your usgbc.org profile

Report course number: 0920021655



AIA Professionals will receive 1.5 continuing education hours for this session.

CEUs can be managed through PG&E training portal and are reported to AIA within 10 business days.

Course number: WS0028

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Cleanups to Connect with Your Watershed!



Reid Bogert – beachcleanups@surfrider.org
Beach Cleanup Coordinator – San Mateo Chapter

A large, powerful ocean wave is crashing, creating a massive wall of water and a thick spray of white foam. A faint rainbow is visible in the mist created by the breaking wave. The sky is a pale, hazy blue.

Surfrider Foundation is dedicated to the protection and
enjoyment
of the world's ocean, waves and beaches
through a powerful grassroots activist network.

SURFRIDER – NORTH AMERICA NETWORK

10

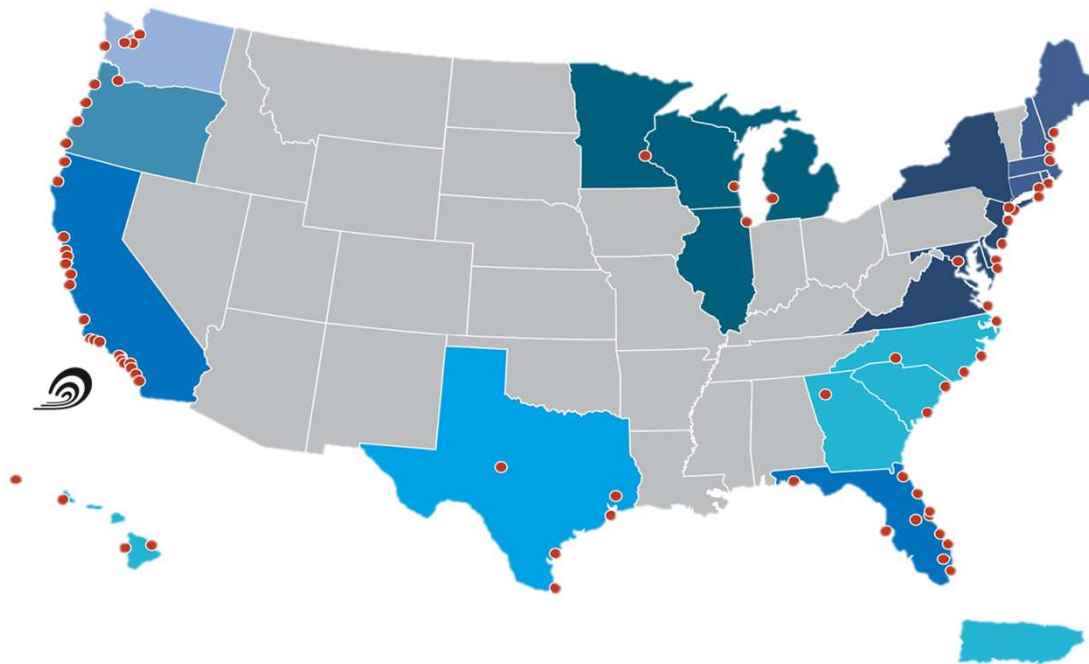
REGIONS

81

CHAPTERS

84

YOUTH CLUBS



10,000+
ACTIVISTS



50,000+
MEMBERS



1,000,000+
SUPPORTERS

1984

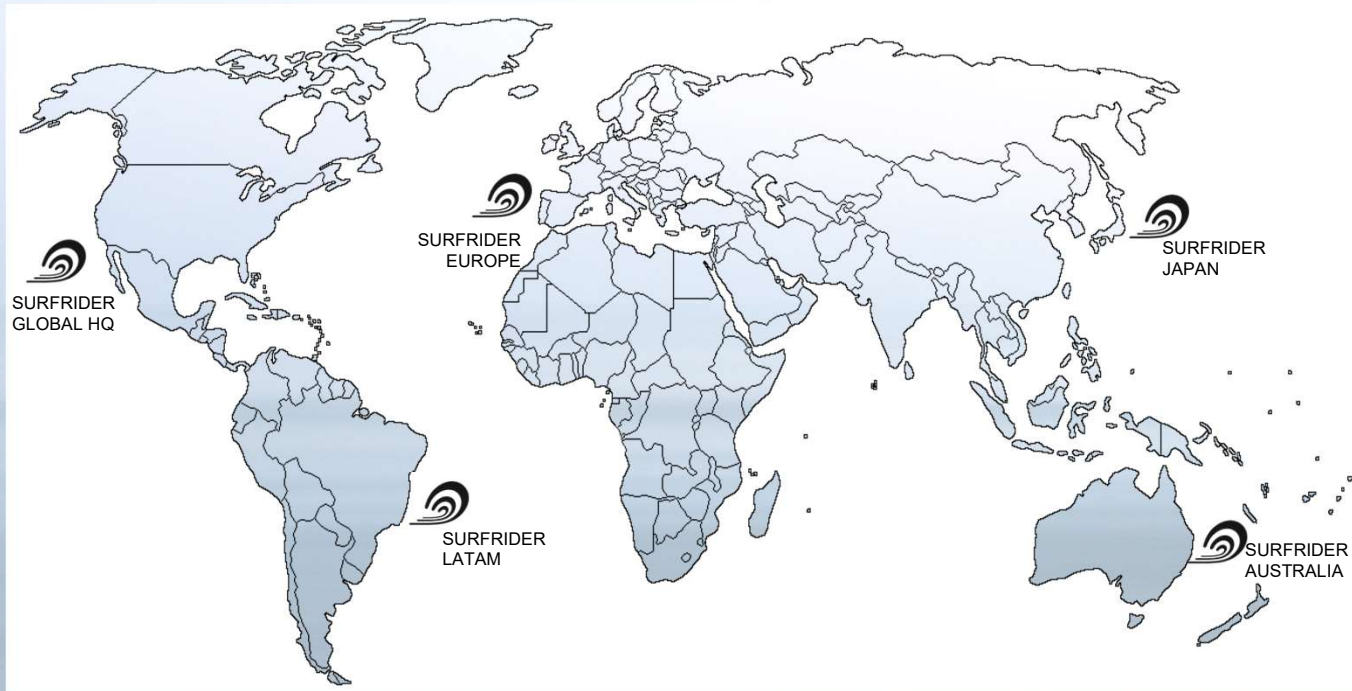
ESTABLISHED

SURFRIDER – GLOBAL NETWORK

20
COUNTRIES

136
CHAPTERS

60
YOUTH CLUBS



25,000+
ACTIVISTS



50,000+
MEMBERS



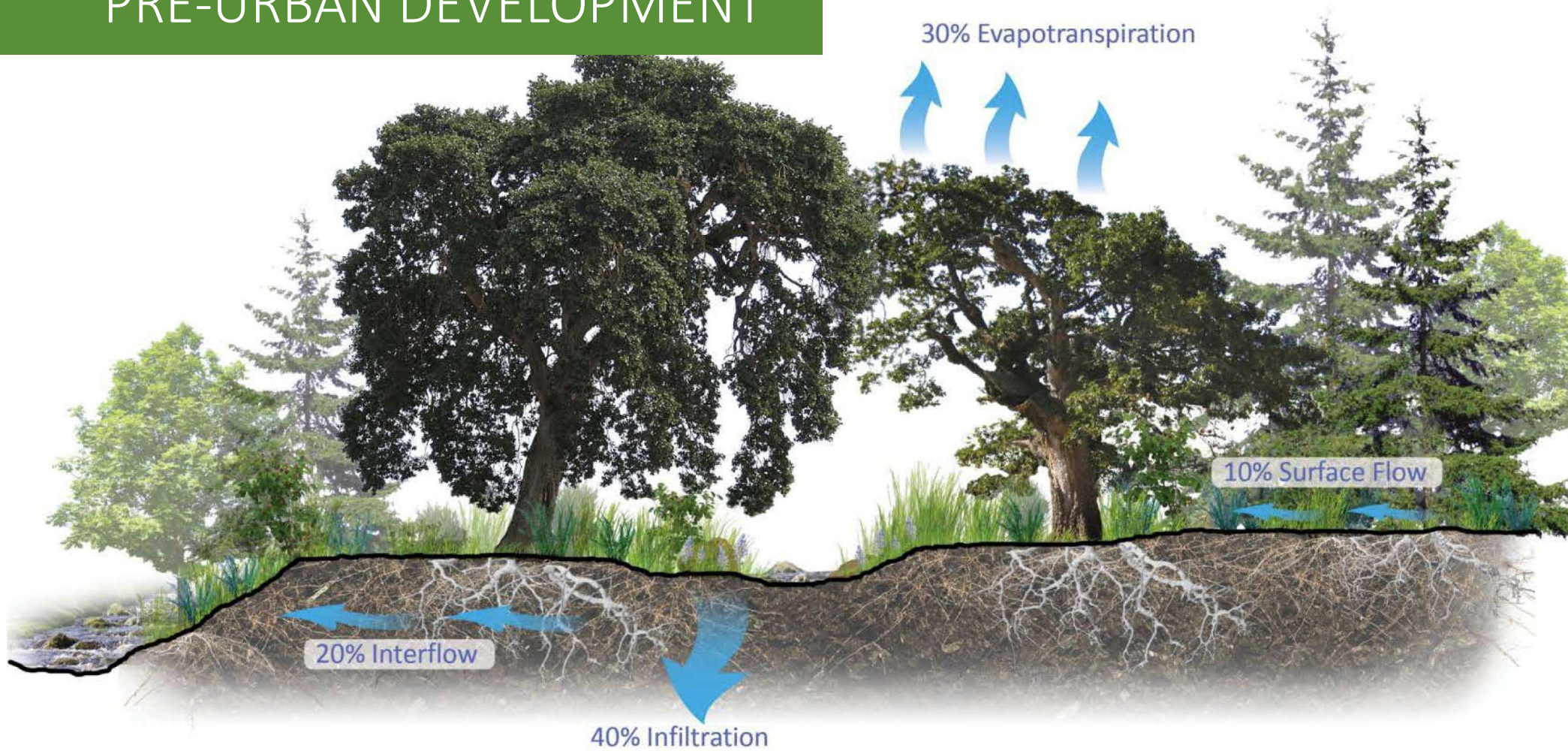
1,000,000+
SUPPORTERS

1984
ESTABLISHED

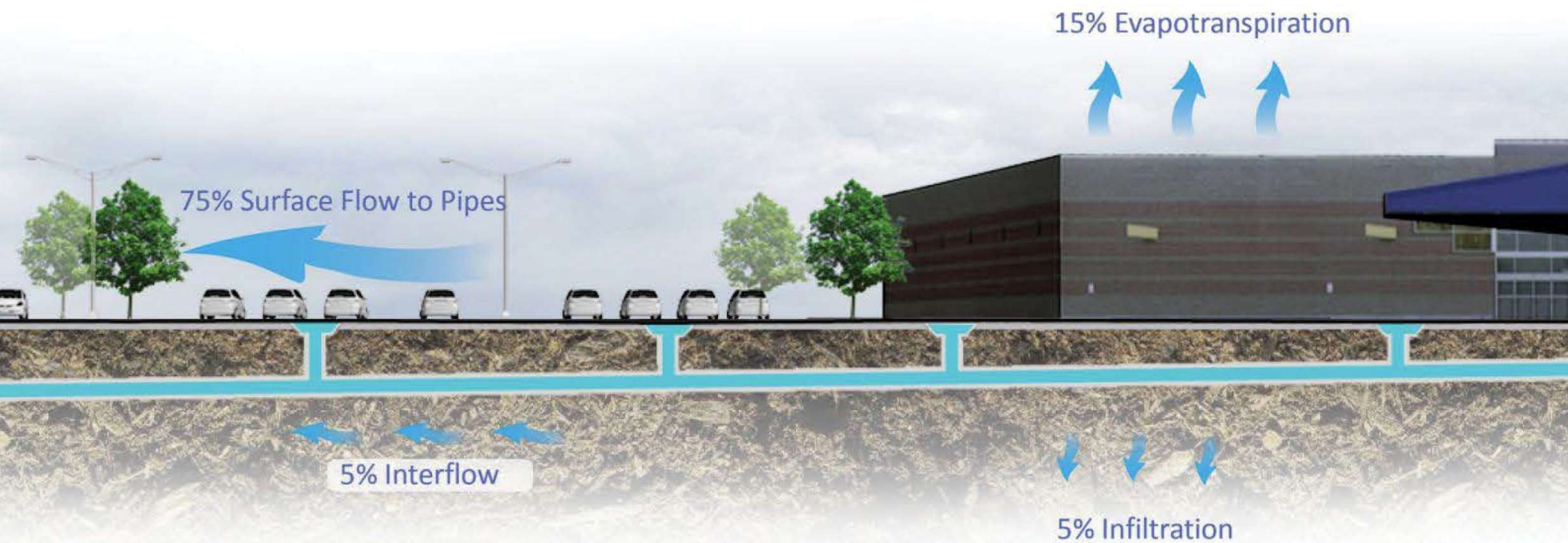
May 2017

What's the Watershed Connection?

PRE-URBAN DEVELOPMENT



URBAN DEVELOPMENT



Balanced Development

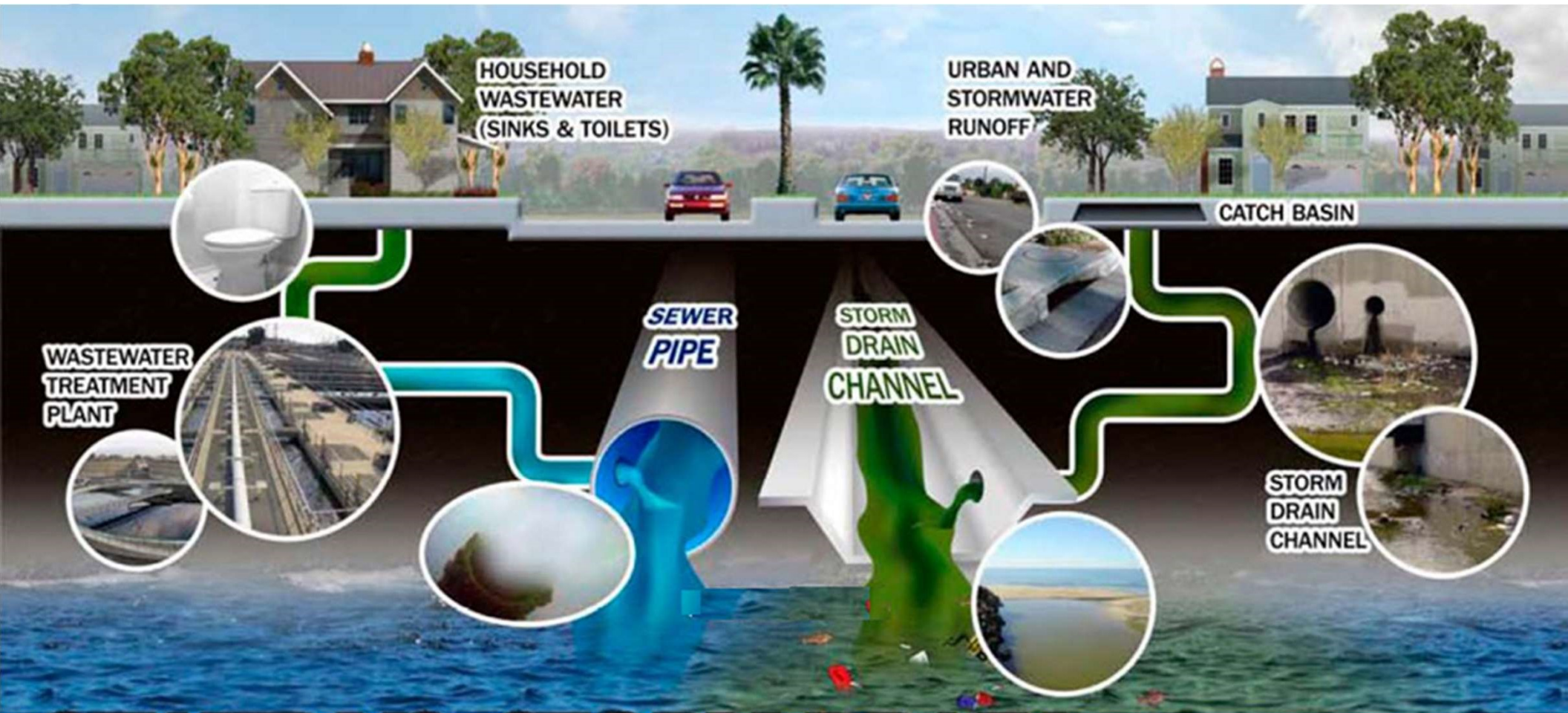




What's the deal with Stormwater?

- Stormwater washes pollutants into storm drains and out into creeks, the bay, or ocean without removing pollutants

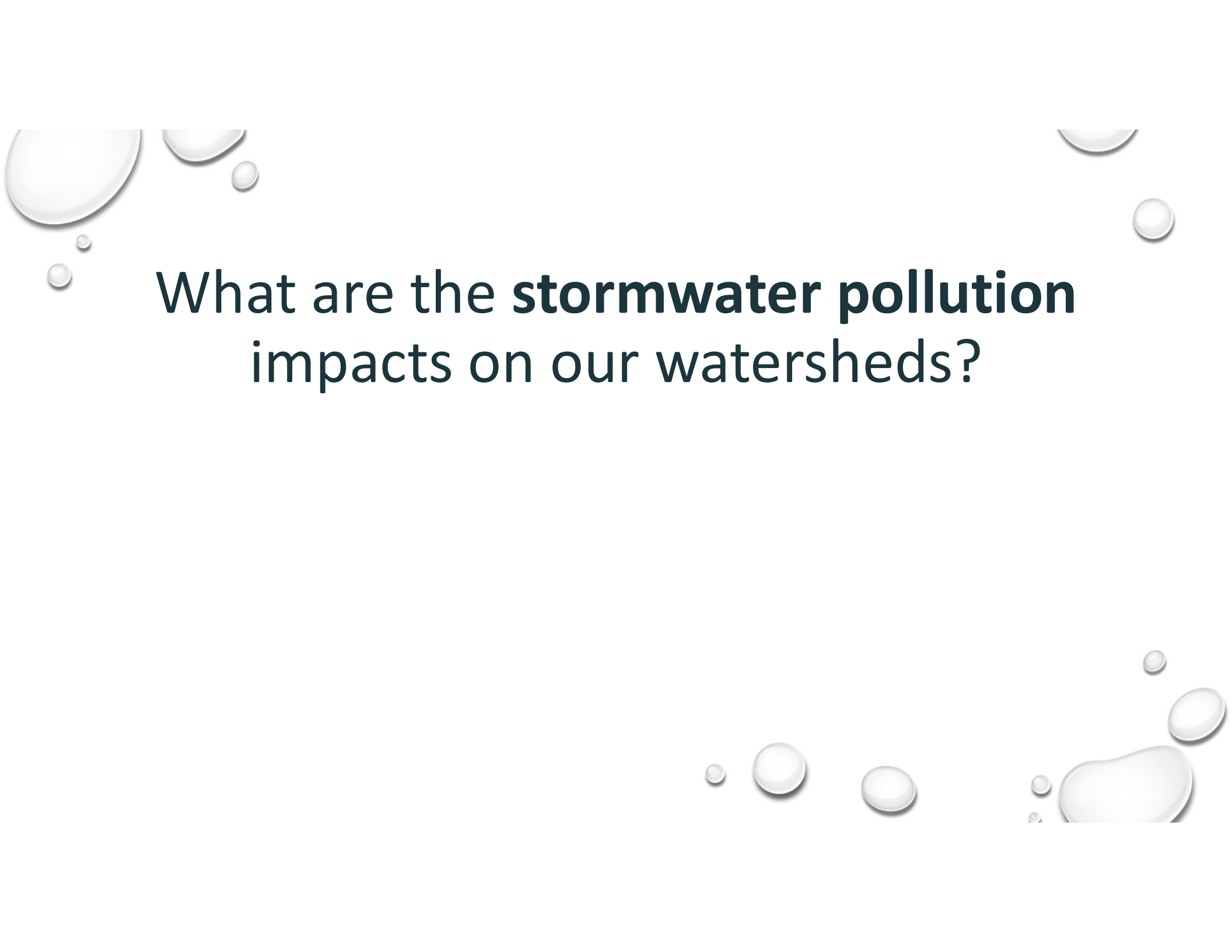
Sewer System vs. Storm drain System



What are the Pollutants?

- **Litter:** cigarette butts, food wrappers, plastic bags and bottles, cans (many sources)
- **Natural pollutants:** leaves, garden clippings, pet waste, wild animal waste
- **Chemical pollutants:** detergents from car washing, pesticides, used motor oil



The image features a white background with several realistic water droplets of varying sizes. These droplets are positioned in the corners: top-left, top-right, and bottom-right. The droplets have highlights and shadows, giving them a three-dimensional appearance.

What are the **stormwater pollution** impacts on our watersheds?



#1: Public Health Risk

- Stormwater pollution increases the risk of viral infections, fever, flu, rashes, and other human diseases
- Litter and animal waste carry disease-spreading bacteria
- Clogged storm drains lead to flooding during the rainy season
- Fish consumption advisory



#2: Damages natural resources

- Leading source of pollutants to our rivers, creeks, ocean and bay
- Potential of contamination of shallow groundwater wells
- Threat to water quality and natural areas



#3: Devastates Wildlife

- Polluted runoff can have devastating effects on fish and other aquatic wildlife
- Litter carried to the ocean is deadly for marine life



Beach Cleanups to Reconnect and Find Relief!

- **Monthly Cleanups on the Coast!**
- Monthly cleanups EVEN during COVID.

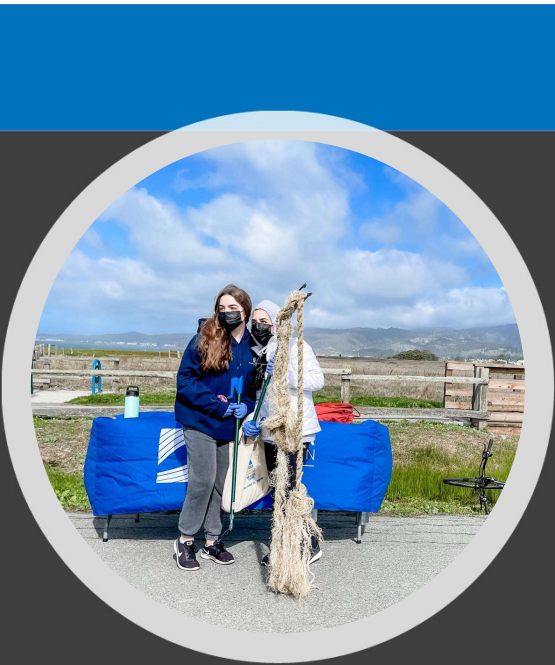
- **Cleanup Sites**

- **Pescadero Beach**
- **Poplar Beach**
- **Francis State Beach**
- **Venice Beach**
- **Dunes Beach**

- **Data Collection + Citizen Science!**

- Surfrider collects data on everything that our volunteers remove from the beach to track trends and changes over time.





COVID Beach Cleanups!

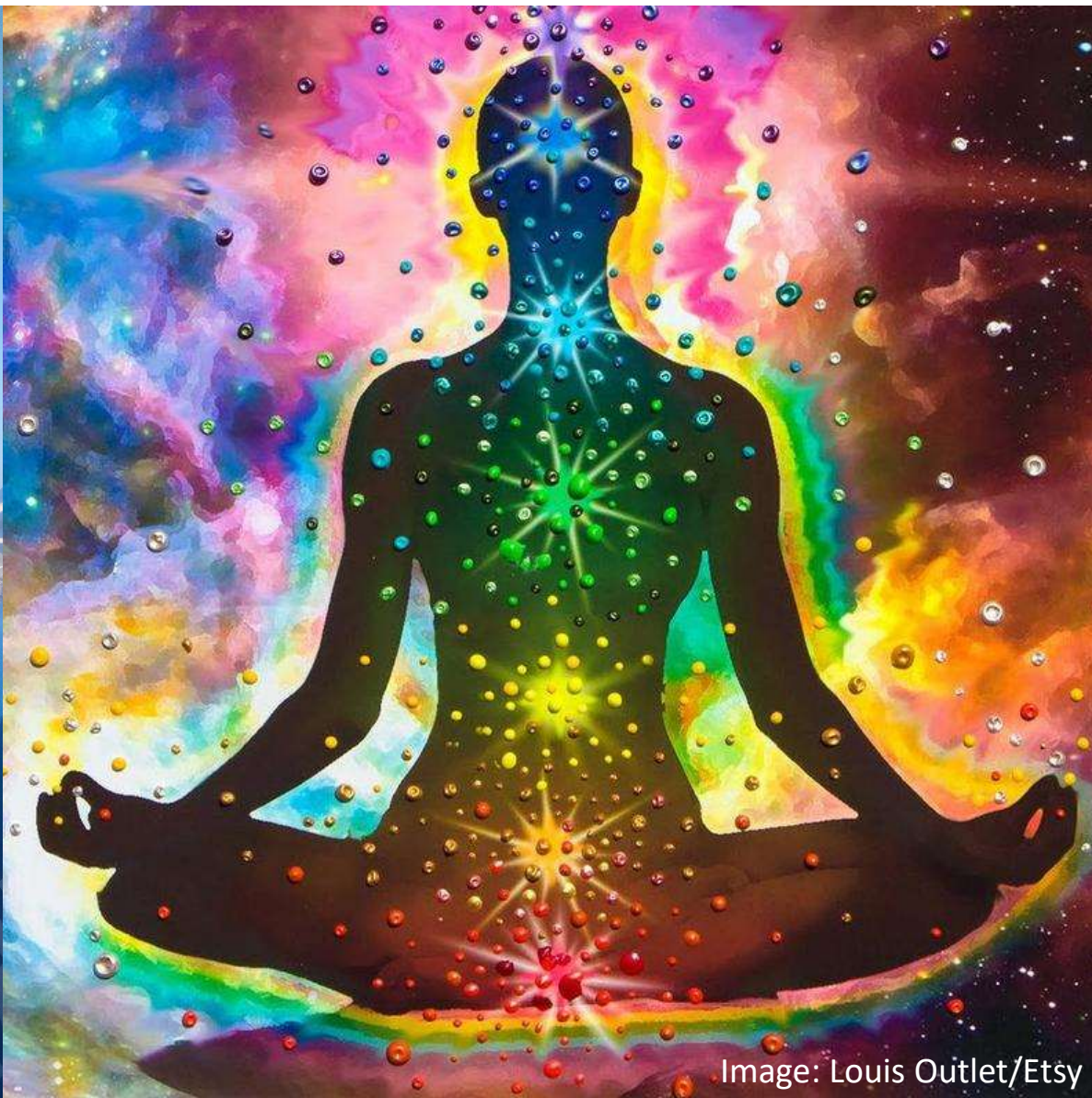


Image: Louis Outlet/Etsy

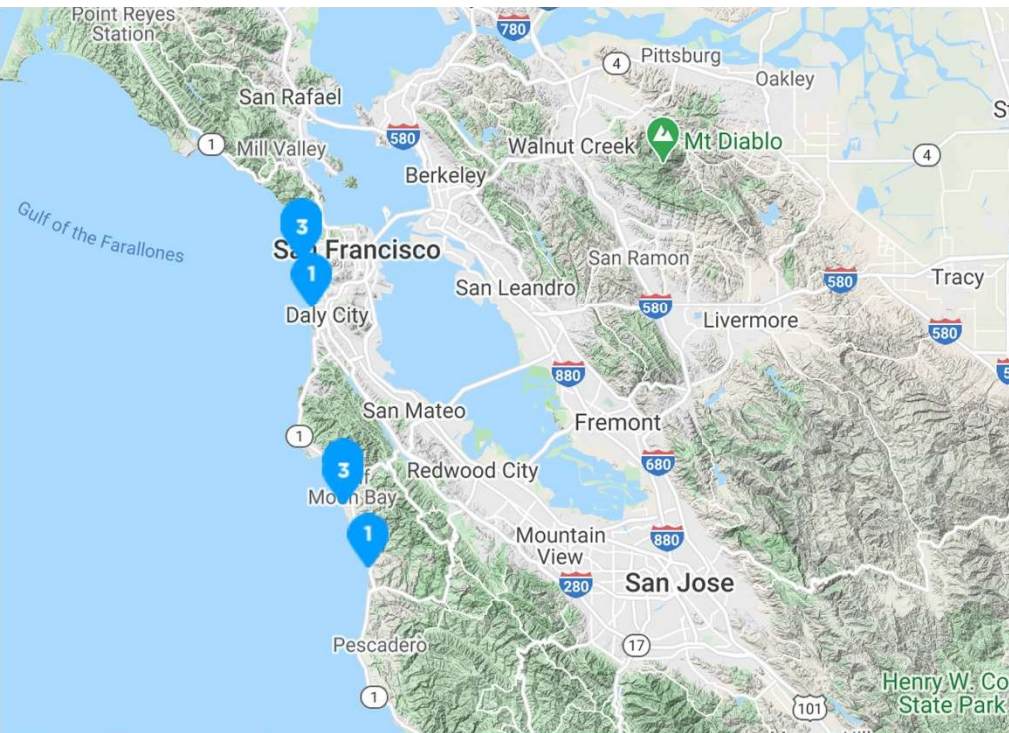


BEACH CLEANUPS

A Surfrider Foundation program to tackle the ocean litter issue - primarily caused by plastic pollution - through education for action, citizen science, and campaigns. We are all part of the solution and together we can restore our coastlines, one beach at a time.

[VIEW RESULTS](#)[INPUT CLEANUP DATA](#)

www.cleanups.surfrider.org



CLEANUP RESULTS



ORGANIZED BY SAN MATEO COUNTY

CO-ORGANIZED BY SAN MATEO COUNTY

DATE 01/30/2021

TYPE LAND

LOCATION TUNITAS CREEK BEACH



8

of
volunteers



74

pounds of
trash

ITEMS COLLECTED



HELP

LOGIN / REGISTER

RESULTS

Map

The Data Are In!

WASTE COLLECTED

Total number of items collected in **221 cleanups**: **66255 quantified items**.

TOP 10 ITEMS COLLECTED



COVID-19 PRIORITY ITEMS



FRAGMENTS





SOLO BEACH CLEANUP GUIDANCE

Required Guidelines for Solo Beach Cleanups

The following Surfrider Foundation rules must be followed when promoting Solo beach cleanups to your community in order to ensure individuals are equipped to make an educated, safe and mindful decision to conduct a DIY Solo cleanup while following CDC public health guidance, local beach access restrictions, and EPA recommendations for properly discarding used PPE items.

- Be responsible! If you are feeling sick or generally unwell, please stay indoors and heal.
- What to bring: mask/cloth face covering, gloves, 60% alcohol-based hand sanitizer, grabbers (if you have them), 2 separate collection receptacles.
- Check with your local authority on beach use and access restrictions. Select a location or a less trafficked spot with few people where you can maintain a minimum physical distance of 6 feet. Avoid crowded areas at crowded times.
- Wear a mask or cloth face covering when in public per CDC recommendations
- Wear gloves. We cannot stress this safety precaution enough. Viruses can live on hard surfaces, and individuals should exercise extreme caution when collecting litter. Wearing gloves discourages you from touching your face or face covering. If using reusable

Heal – by taking action outdoors

Protect – water resources we all depend on





Reid Bogert – beachcleanups@surfrider.smc.org
Beach Cleanup Coordinator – San Mateo Chapter

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Showcase Raffle: Two Ways to Win!



Complete our post-event survey to be entered to win a \$50 gift card! Survey will be sent to all registrants at the end of the Showcase.



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tinyurl.com/WCSexhibitor