

# Rain Ready California

Protecting and Collecting Water for Our Future

**CASQA 2023 Annual Conference**  
September 11-13  
Paradise Point in San Diego



California Stormwater Quality Association  
[www.casqa.org](http://www.casqa.org)

**PROGRAM**

# Welcome

## Dear Conference Attendees:

Welcome to the 2023 CASQA Annual Conference at Paradise Point Resort in beautiful San Diego, CA. We are thrilled to spend the next few days with you and hope your conference experience includes learning from the leading experts in our field, as well as connecting with old and new friends alike.

The last few years have demonstrated the impact of drought, floods, and the changing magnitude and frequency of our precipitation events. Now, more than ever, the work in the stormwater management field is critical to achieving a more resilient future. *Rain Ready California: Protecting and Collecting Water for Our Future* represents a pivotal moment for stormwater as it is not only the theme of the conference, but a public messaging campaign developed by CASQA for implementation at the statewide scale, as well as by our members in your local communities.

Collectively, our actions can lead to a *Rain Ready California*. What does that look like? Investing in our communities to reconnect the hydrologic cycle (e.g., stormwater capture). Rethinking how we work to integrate across water sectors to achieve our shared common goals. Protecting our waterways through true source control and effective BMPs. Engaging within the stormwater profession and the communities we serve to communicate that stormwater is a resource. Advocating for funding, regulations, and legislation to support these outcomes. And most importantly, learning from each other to make it all possible. Let's get *Rain Ready* together!

CASQA is at work for our members, each and every day. Advancing stormwater capture, true source control / pollution prevention, funding for stormwater projects and programs, and regulatory and legislative engagement are just a small portion of the programs and services CASQA provides. Our impact is possible thanks to the engagement of our members. If you are not yet a member, we invite you to help us make an even bigger impact by joining CASQA.

**Together, we can truly make a difference!**



Karen Cowan, *Executive Director*  
California Stormwater Quality Association



Karen Cowan



Dalia Fadl, *Chair*  
CASQA Board of Directors



Dalia Fadl

# CASQA 2023 Annual Conference

# Rain Ready California

Protecting and Collecting Water for Our Future

---

“Now, more than ever, the work in the stormwater management field is critical to achieving a more resilient future.”

---

“Collectively, our actions can lead to a *Rain Ready California*.”

---

“CASQA is at work for our members, each and every day.”

– Karen Cowan and Dalia Fadl

## Get the Conference App

Personalize your conference experience with our CASQA Annual Conference mobile app for Apple iOS or Android.

- Bookmark presentations and events in the conference agenda to create your own schedule, which can be exported to the native calendar on your smartphone or digital tablet.
- Find meeting rooms, exhibitors, and event locations via interactive maps.
- Connect with other attendees.



## Contents

- 3 San Diego
- 6 Conference Map
- 7 Conference Overview
- 9 Technical Program Overview
- 11 Conference Tracks & Field Tour
- 12 2023 CASQA Awardees
- 17 Agenda: Sunday
  - Registration & Welcome Reception
- 17 Agenda: Monday
  - Plenary Session
  - Poster Session
  - Field Tour
  - Technical Program
  - Networking Event
- 21 Agenda: Tuesday
  - Poster Session
  - Technical Program
  - Exhibitor Reception
- 24 Agenda: Wednesday
  - Poster Session
  - Technical Program
  - Exhibitor Prize Drawing
  - Capstone Session
- 29 Poster Presentations
- 31 Sponsors & Exhibitors
- 33 Exhibit Hall Map
- 34 Exhibitors
- 36 CASQA Staff, Board, & Subcommittees
- 37 Conference Subcommittee

# Creating resilient 'rain-ready' communities and infrastructure since 1955



# San Diego



Courtesy of Paradise Point

Paradise Point

## Paradise Point

Tucked away in gentle Mission Bay in the heart of San Diego, Paradise Point is located on a 44-acre island with tropical gardens, tranquil lagoons, and one mile of sandy beach.

The area waterways and shorelines provide a habitat for many birds, fish, marine mammals, invertebrates, and plants, giving visitors the chance to witness some of Southern California's indigenous species in their natural surroundings.

### Paradise Point

1404 Vacation Road  
San Diego, CA 92109

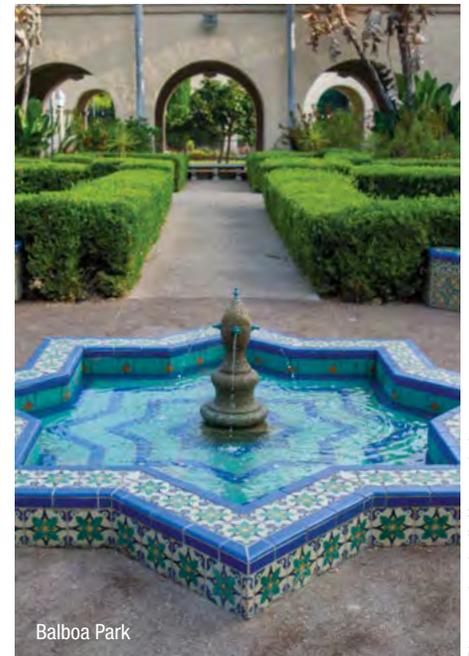
## Things to do in San Diego

While in San Diego, take advantage of nearby attractions and activities for all ages. The location is secluded, yet centrally situated, with the San Diego airport, downtown area, and top attractions including Old Town, beaches, the San Diego Zoo, and Balboa Park just minutes away. San Diego enjoys average temperatures in September of 77°F high / 66°F low.



Photographer: David Deleon, [unsplash.com](https://unsplash.com)

Scripps Pier in La Jolla



Photographer: Leslie Yu, [unsplash.com](https://unsplash.com)

Balboa Park



Photographer: Claude Piche, [unsplash.com](https://unsplash.com)

Pacific Beach



Photographer: Lance Anderson, [unsplash.com](https://unsplash.com)

San Diego Zoo



Watershed Protection Program - Committed to Operational Excellence  
Award Winning Plans & Projects

SWEETWATER LANE  
COMMUNITY PARK  
TRASH CAPTURE



Project Area

APWA PROJECT  
OF THE YEAR  
2023



NACo 2023  
ASSN OF ENVIRONMENTAL  
PROFESSIONALS 2022

COUNTY OF SAN DIEGO  
WATERSCAPE  
REBATE PROGRAM



NACo 2023

HOST PROGRAM SPONSOR ^



# What's your stormwater issue?



Visit our interactive ideas page to learn more about stormwater issues that may impact your community.

Design with community in mind  
[stantec.com/stormwater](https://stantec.com/stormwater)

GOLD STORMWATER STEWARD ^

# LARRY WALKER ASSOCIATES

## Environmental engineering & consulting

Innovating water management solutions across California for over 40 years



Stormwater • Wastewater • Watershed Management  
Agricultural Water Quality Management • Groundwater

Davis, Berkeley, San Diego, Santa Monica, Seattle, Ventura 530.753.6400 [www.lwa.com](http://www.lwa.com)

GOLD STORMWATER STEWARD ^



## Helping you manage your water resources through the years.

As the stormwater regulatory environment and industry has evolved, WSP's staff has been here to help you navigate the changes.

We are ready to work hand in hand to find innovative, cost-effective solutions to manage your watershed challenges.

- Stormwater capture and water quality monitoring
- Permitting, compliance, and inspections
- Engineering and Natural Solutions design
- Source identification
- Microbial source tracking
- Molecular analytical services



San Diego Offices: 401 B Street, Suite 1650 | 9177 Sky Park Court | [wsp.com](http://wsp.com)

GOLD STORMWATER STEWARD ^

# Conference Map

## Paradise Point

(Map not to scale)



- Conference Services / Registration Desk
- Coffee & Break Mon AM
- Plenary Session / Lunches / Capstone Session
- Technical Program Sessions / Field Tour
- Poster Presentations
- Exhibits / Breaks Mon PM – Wed AM / Exhibitor Reception / Prize Drawing
- Welcome Reception / Networking Event

# Conference Overview

The CASQA Annual Conference offers in-depth learning opportunities and discussions on a wide range of stormwater and water management topics, with a focus around the conference theme, *Rain Ready California: Protecting and Collecting Water for Our Future*. The Plenary Session will officially kick off the conference and includes our CASQA Award Announcements and Keynote Address. Conference thematic technical presentations, panel discussions, and training workshops following multiple concurrent tracks over three days will be presented by leading stormwater practitioners. New this year, the Capstone Session will close the conference, featuring leaders from various water sectors throughout California engaged in conversations about achieving a *Rain Ready California*. Attendees will also have multiple opportunities to network with fellow conference goers and explore the offerings in the Exhibit Hall.



## Highlights

- **Three day conference:** Mon – Wed, Sep 11 – 13, 2023
- **Multi-track Technical Sessions** with 136 technical presentations, 15 panels, and 6 training workshops incorporated throughout the conference
- **Post-conference access** to Technical Session recordings is included with a paid Full Conference pass. There will be no live streaming/virtual access during the conference
- **Poster Session**
- **Field Tour**
- **Plenary Session:** Opens the conference including the CASQA Award Announcements and Keynote Address (all attendees)
- **Capstone Session:** Closes the conference with an invited panel of leaders (all attendees)
- **Exhibit Hall** including an exhibitor-sponsored prize drawing
- **Networking Opportunities:**
  - › **Welcome Reception - Sun, Sep 10:** This is a great way to break the ice before the official start of the conference (appetizers; cash bar)
  - › **Networking Event - Mon, Sep 11:** Socialize after hours, enjoy food and entertainment, and continue the stormwater discussion (dinner; cash bar)
  - › **Exhibitor Reception - Tue, Sep 12:** Exhibitors and conference attendees always enjoy a chance to interface in this cordial and relaxed environment (appetizers; cash bar)



All photos on this page were taken at the 2022 conference by photographer [Rand Larson](#).



CASQA 2022 Annual Conference

Photographer: Rand Larson



Paradise Point

Courtesy of Paradise Point

# Technical Program Overview

The 2023 Technical Program comprises the robust conference offerings listed below, in the thematic tracks that are detailed on the following page.

13  
SESSIONS

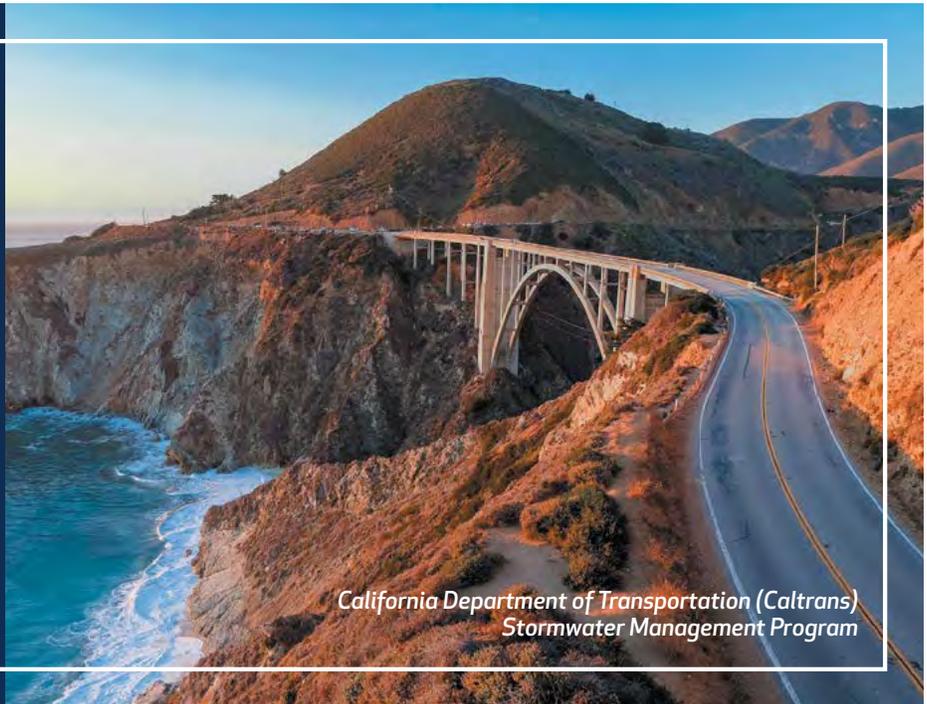
14  
TRACKS

136  
TECHNICAL  
PRESENTATIONS

15  
PANELS

6  
TRAINING  
WORKSHOPS

PROVIDING A  
FULL CONTINUUM  
OF INNOVATIVE  
WATER SERVICES  
TO RESTORE  
AND ENHANCE  
OUR NATION'S  
INFRASTRUCTURE



California Department of Transportation (Caltrans)  
Stormwater Management Program

**Michael Baker**  
INTERNATIONAL

*We Make a Difference*

**MTBAKERINTL.COM**

GOLD STORMWATER STEWARD ^

# STORMWATER EXPERTS

**GSI**  
ENVIRONMENTAL  
[www.gsienv.com](http://www.gsienv.com)



## PRACTICAL STRATEGIES AND SOLUTIONS

- > Industrial, Municipal, and Construction Stormwater Services
- > Clean Water Act Citizen Suits and Expert Service
- > Engineering and BMP Design

17595 Irvine Center Drive, Suite 250  
Irvine, California 92618  
949.679.1070

2000 Powell Street Suite 820  
Emeryville, California 94608  
510.463.8484

1839 Iron Point Road, Suite 150  
Folsom, California 95630  
510.463.8484

GOLD STORMWATER STEWARD ^

# Conference Tracks & Field Tour

## BMP Effectiveness

This track will focus on advances in BMP performance and in BMP effectiveness assessment methods for treatment control and source control practices. Assessment methods include performance monitoring, benchtop special studies, innovative assessment methods, operation and maintenance practice assessments, challenges, and solutions, and/or lessons learned/case studies.

## Climate Change, Resiliency, and Sustainability

This track will look at climate resiliency, sustainable practices, legal requirements and barriers, opportunities for collaboration, and programs that connect stormwater and other environmental sectors. Important topics will be discussed such as climate change adaptation and mitigation, water supply, water rights, groundwater recharge, energy, watershed management, integrating climate resiliency with green stormwater infrastructure, and wildfire planning.

## Construction General Permit

This track will focus on the newly adopted 2022 CGP and will include discussions on permit changes and address construction stormwater challenges including: innovative BMPs and controls; TMDL implementation; passive treatment; challenges and solutions to site management; implementing cost controls; resolving monitoring and sampling issues; dealing with the different challenges of linear underground and overhead projects; and other implementation challenges with the newly adopted permit.

## Equity and Environmental Justice

This track will focus on the connections between the business of water management and its direct and indirect impact on underserved communities and will include discussions of current programs; lessons learned; and how to bring diversity, equity, and inclusion into all aspects of our work in stormwater communities.

## Funding

This track will address stormwater program and infrastructure funding and financing, including asset management—both tracking for capitalization and schedule for replacing aging infrastructure, its role in full stormwater program integration, and funding and financing mechanisms that may be available to the regulated community.

## Industrial General Permit

This track will cover various aspects of the Industrial General Permit such as pollutant source assessments, monitoring and reporting,

Exceedance Response Action requirements, Best Management Practices (BMPs), Total Maximum Daily Loads (TMDLs), water quality based corrective actions, compliance options, permit participation initiatives (e.g., SB 205), and Clean Water Act citizen lawsuits.

## Looking Beyond California

This track will focus on advances and practices developed outside of California that California's stormwater practitioners may benefit from. Examples include water management practices, climate/coastal resiliency examples, scientific advances, or any other stormwater practice relevant to California!

## Modeling and Data Tools

This track will focus on modeling of all types, including hydrologic, water quality, and geographic information systems (GIS). Innovative data collection, visualization, assessment tools, and quantification methods and metrics. This track will also include how data tools from other industries may be repurposed for use in the stormwater arena.

## Monitoring and Special Studies

This track will highlight innovations in monitoring methodologies or monitoring programs and the development and implementation of special studies such as those investigating pollutant source, fate, and transport, including how monitoring results can be used to inform stormwater management.

## Municipal Programs

This track will focus on the challenges and solutions faced while implementing a municipal stormwater program for Phase I and Phase II agencies. The track will also address emerging issues for municipalities such as planning activities for permit compliance, workforce development, operations and maintenance, permanent post-construction BMPs, monitoring program challenges and unique solutions, and transient encampments.

## Outreach, Engagement, and Education

This track will share ideas for creating and implementing innovative stormwater outreach projects/programs that are designed to educate the community about stormwater pollution, actions they can take to protect local waterbodies and their watersheds, and the importance of recognizing and utilizing stormwater as a resource. Projects/programs can include efforts such as media campaigns, social media strategies, educational programs for youth, rebate programs, engaging with underserved communities, and measuring the effectiveness of outreach and education activities.

## Pollutants of Concern

This track will focus on statewide priority pollutants, in addition to contaminants of emerging concern: what we know or don't know or need to learn, upcoming regulatory changes that may impact the stormwater community, and new advances in science that allow us to measure or characterize both human and environmental risk related to emerging contaminants. The topics could include trash, PFAS, mercury, pesticides, microplastics, and other constituents of concern.

## Regulatory and Legislation

This track will provide a forum for updates from regulators, discussions of future policy and legislative initiatives, newly enacted legislation and its impacts on stormwater, updates from legal experts, and examples and case studies of legislative engagement and innovative ways that regulatory obligations can be met.

## Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions

This track will highlight examples of physical infrastructure for improving stormwater runoff quality, protecting natural channels from the effects of hydromodification, preventing flood impacts to property, recharging groundwater supplies, permanent post-construction BMPs, and stormwater capture and use. It will focus on planning efforts, pilot studies, design lessons learned, operation and maintenance challenges / solutions, and adaptive management strategies after installation.

## Field Tour

**Offsite:** Mon, Sep 11, 11am – 4pm; limited to 106 participants.

### Tour Locations:

- **Estrella Park Biofiltration & Trash Capture Project:** This project includes biofiltration basins, trash capture, and EV charging incorporation into the park in an at-risk community
- **Mapleview Green Street Project:** This retrofit project includes dispersion areas, biofiltration basins, and veg channels (Proposition 1 SWRCB Grant funded)
- **Los Coches Low Flow Diversion to Sanitary Sewer:** Targeting non-stormwater flows and trash (drive-through/bus discussion)

# 2023 CASQA Awardees

The CASQA annual awards recognize outstanding projects, activities, and people in the stormwater management profession. Photos and illustrations below, courtesy of the respective awardees.

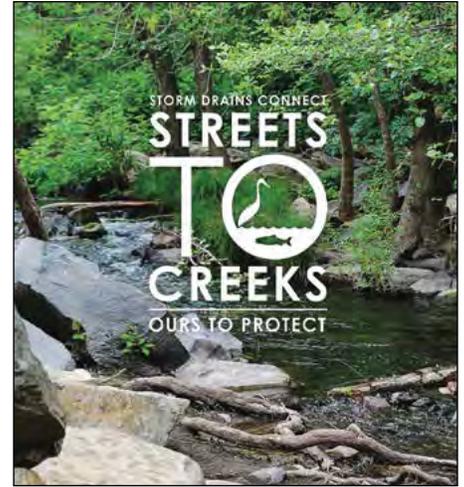


## Outstanding Public Outreach / Engagement Project or Program

### Storm Drains Connect **STREETS TO CREEKS**, Ours to Protect

*City of Santa Rosa*

Streets to Creeks is an innovative and extraordinary public outreach campaign inspiring individuals and communities to protect their local waterways. Streets to Creeks has strategically employed a diverse array of bilingual media to create awareness about the impact that everyday activities at home and work have on water quality in local waterways, to inspire community action to reduce pollution at the source. The program has created a cohesive regional brand, uniting outreach efforts across over a dozen jurisdictions.



## Outstanding Stormwater BMP Implementation Project or Program: Phase I

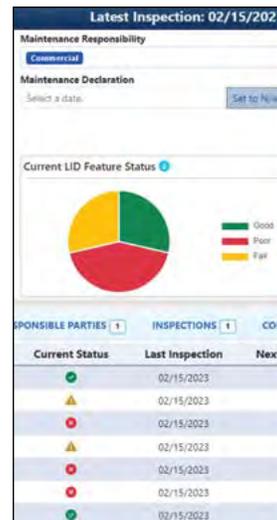
### Low Impact Development Compliance Manager Application

*City of Santa Rosa*

This application was developed from the ground up by the City of Santa Rosa. It is currently tracking 1,460 LID features across 139 projects. This software and database project tackles the most difficult challenges of tracking, monitoring, and inspecting Low Impact Development within the city. The application automates much of the manual work in generating the documentation for communicating corrective actions to Responsible Parties.



*Real-time Management Dashboard*



*Maintenance Lifecycle*

# Congratulations to This Year's Awardees!

 Look for the small blue ribbon icons in the Agenda and Poster Presentation sections of this program for presentations by CASQA 2023 Awardees.



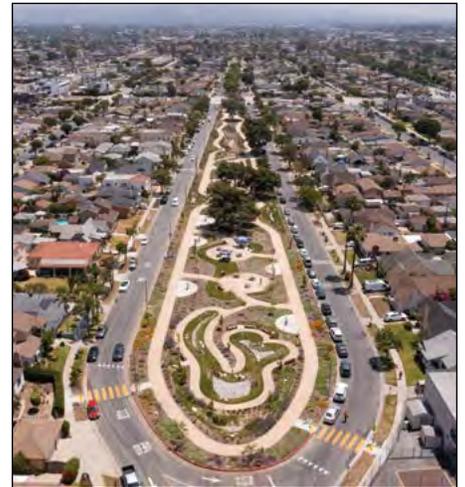
## Outstanding Stormwater Capture and Use Implementation Project or Program

### East Los Angeles Sustainable Median Stormwater Capture Project

*Los Angeles County Public Works*

The East Los Angeles Sustainable Median Stormwater Capture Project is a regional project that integrates both below-ground and above-ground green infrastructure to improve water quality, increase water supply, and provide a multitude of benefits to the community.

The project integrates water quality components and green infrastructure, including 103 infiltration wells and biochar modules for pollutant removal.



## Outstanding Stormwater Science Project or Program: Student

### Analysis of Water Quality Near Areas of Homeless Activity on Santa Rosa Creek and Russell Creek

*Claudia Mayo, Sonoma State University*

This project lays the foundation for future analysis of the impact of homeless encampments on water quality in stormwater entering urban creeks. Water quality was tested upstream and downstream of areas with frequent homeless encampments on Santa Rosa Creek and Russell Creek.



*Datasonde*



*Grab water sample*



This season, our headquarters BMP demonstration site helped replenish our local aquifer by collecting and infiltrating nearly 600,000 gallons of rainwater.



30 YEARS CELEBRATING  
CASQ  
ENGINEERING AND CONSULTING

Rain Ready for three decades  
Think about what we can do for you!

[www.cascinc.com](http://www.cascinc.com)

GOLD STORMWATER STEWARD ^



## Real Solutions for the Natural and Human Environment

For the last 20 years, *Engineering News-Record* has ranked Tetra Tech #1 in Water. Our team provides full-spectrum stormwater services, including cutting-edge watershed studies, sustainable BMP designs, smart monitoring approaches, and expert regulatory support.



[tetratech.com](http://tetratech.com) |    

GOLD STORMWATER STEWARD ^



## Outstanding Service Awardees

Each year CASQA recognizes and expresses its appreciation to the individuals that have gone above and beyond in providing outstanding service to CASQA, and in doing so, have advanced CASQA and the profession. Congratulations to the 2023 CASQA Outstanding Service Awardees!

**TJ Moon and Mark Lombos**, *Los Angeles County, Department of Public Works*

Outstanding service in increasing CASQA membership (LA Region)

**Jenna Voss**, *County of Orange, formerly, Jeanette Huddleston*, *Sacramento County, Taraneh Nik-Khah*, *City of Los Angeles*

Developing CASQA's public education campaign: Rain Ready California

**Jeanette Huddleston**, *Sacramento County*

Outstanding contributions through 6 years of service as Co-Chair of the Engagement and Education Subcommittee

**Kadi Whiteside**, *Southern California Edison*, **John Heltzel**, *Office of Water Programs at Sacramento State*

Leading the update to CASQA's Construction BMP Handbook in response to the 2022 CGP

**Amanda Carr**, *County of Orange*

6 years of service on the Board of Directors  
2 years as Chair of the Board of Directors

**Richard Boon**, *Riverside County Flood Control and Water Conservation District*

6 years of service on the Board of Directors  
12 years of service cumulatively on the Board of Directors (prior 6-year term)

**Dalia Fadl**, *City of Rancho Cordova*

2 years as Chair of the Board of Directors

**Patrick Kuga**, *Michael Baker International*

Outstanding contributions through 6 years of service as Co-Chair of the Non-Traditional Phase II Subcommittee

Outstanding service in modifying the Construction General Permit Training Program

**Kadi Whiteside**,  
*Southern California Edison*

**Jeff Endicott**,  
*CASC Engineering and Consulting*

**Gerry Montgomery**,  
*SWPPQUEEN, Inc.*

**Russ Foster**,  
*JF Shea Construction*

**Sandy Mathews**,  
*Larry Walker Associates*

**John Heltzel**,  
*Office of Water Programs at Sacramento State*

**Matt Hromatka**,  
*Sierra Overhead Analytics*

**Shawnetta Grandberry**,  
*City of Carlsbad*

**Mark Grey**,  
*Building Industry Association of Southern California*

**Andrew Sidor**,  
*Michael Baker International*

**Melanie Sotelo**,  
*CASC Engineering and Consulting*

**Daniel Apt**,  
*Olaunu*



## Outstanding Partnership Awardees

**Amy Kronson and Brandon Roosenboom**, *State Water Resources Control Board*

Outstanding partnership in modifying the Construction General Permit Training Program



# DON'T WASTE BEAUTIFUL



**THROW AWAY  
YOUR TRASH  
& KEEP LA  
LITTER-FREE**

Scan the QR code or visit  
[WaterforLA.com](http://WaterforLA.com) to learn more.



  @WaterforLA

MUNICIPAL STORMWATER STEWARD ^



## ACO Stormwater Management

ACO's stormwater management solutions revolutionize the way we handle urban water runoff, setting a new standard for sustainability and environmental stewardship. With their cutting-edge technologies and innovative designs, ACO provides comprehensive and efficient systems that effectively capture, treat, and reuse stormwater, mitigating the harmful effects of runoff on our ecosystems.



888.490.9552 [info.acocsa.com](http://info.acocsa.com) [acoswm.com](http://acoswm.com)

Start your project today at:  
<https://scheduler.acotechsupport.com>



NETWORKING EVENT SPONSOR ^



**Stormwater Solutions** that Keep California Water Resources Clean

Runoff Reduction ♦ Bioretention ♦ Trash Capture ♦ Detention  
Low Impact Development ♦ Green Infrastructure



Contech Engineered Solutions LLC  
[www.ContechES.com](http://www.ContechES.com) | 800.338.1122

NETWORKING EVENT SPONSOR ^

# Agenda

## SUN SEP 10

4:00p - 7:00p	<b>CONFERENCE SERVICES</b>	<b>LOCATION:</b> PARADISE FOYER Conference Services and Registration Desk
5:00p - 7:00p	<b>WELCOME RECEPTION</b>	<b>LOCATION:</b> BAREFOOT BAR & GRILL This casual event is a great way to break the ice before the official start of the conference (appetizers; cash bar).

## MON SEP 11

7:30a - 8:30a	<b>COFFEE</b>	<b>LOCATION:</b> DECK AREAS – SUNSET, BAY VIEW, DOCKSIDE Coffee and Refreshments
7:30a - 5:30p	<b>CONFERENCE SERVICES</b>	<b>LOCATION:</b> PARADISE FOYER CONFERENCE SERVICES AND REGISTRATION DESK
8:30a - 10:30a	<b>PLENARY SESSION</b>	<b>LOCATION:</b> PARADISE TERRACE
	<b>WELCOME AND OPENING REMARKS</b> Dalia Fadl <i>Chair</i> – CASQA Board of Directors Karen Cowan <i>Executive Director</i> – CASQA	<b>CASQA AWARDS</b> BOARD OF DIRECTORS / EXECUTIVE PROGRAM COMMITTEE RECOGNITION OUTSTANDING SERVICE: Karen Cowan EXHIBITOR RECOGNITION: Karen Ashby, <i>Exhibitor Coordinator</i> OUTSTANDING STORMWATER PROGRAMS AND PROJECTS: Melanie Sotelo, <i>Chair</i> – CASQA Awards Committee
		<b>KEYNOTE</b> Marty Ralph <i>Executive Director</i> – Center for Western Weather and Water Extremes (CW3e), UC San Diego Scripps Institution of Oceanography
10:30a - 11:00a	<b>BREAK</b>	<b>LOCATION:</b> DECK AREAS & GARDEN FOYER Break and Poster Presentation Authors Available
10:30a - 5:00p	<b>POSTER SESSION</b>	<b>LOCATION:</b> GARDEN FOYER
11:00a - 4:00p	<b>FIELD TOUR</b>	<b>LOCATION:</b> OFFSITE Limited to 106 participants (lunch included) The tour will visit three locations: Estrella Park Biofiltration & Trash Capture Project, Mapleview Green Street Project, Los Coches Low Flow Diversion to Sanitary Sewer



### Keynote Speaker: Marty Ralph

**Executive Director – Center for Western Weather and Water Extremes (CW3E), UC San Diego Scripps Institution of Oceanography**

Dr. F. Martin Ralph is a synoptic and mesoscale research meteorologist focused on understanding the physical processes that create extremes in precipitation ranging from flood to drought, and on advancing associated observations, predictions, climate projections and decision support tools. A primary topic has been atmospheric rivers and their role in mid latitude precipitation. From 2001 – 2013 he was Chief of the Water Cycle Branch at NOAA's Earth System Research Laboratory in Colorado where he

led the development of the Hydrometeorology Testbed. He also managed NOAA's Science, Technology and Infusion Program, Chaired NOAA's US Weather Research Program Executive Committee, and led the creation of NOAA's Unmanned Aircraft Systems Program. In 2013 he moved to the University of California San Diego/Scripps Institution of Oceanography where he is developing the "Center for Western Weather and Water Extremes."

# MON SEP 11 CONTINUED

SESSION <b>1</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Funding	TRACK: BMP Effectiveness	TRACK: Construction General Permit	TRACK: Pollutants of Concern	TRACK: Modeling and Data Tools	TRACK: Regulatory and Legislation
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Jim Rasmus Stantec	Chris Crompton Michael Baker International	Sandeep Bhonsle Keish Environmental	Stacy Sinclair Flatiron West, Inc.	Geremew Amenu Los Angeles County	Gabrielle Soto Environmental Resources Management	Hawkeye Sheene West Yost
11:00a - 11:25a	<i>Unlocking the Full Potential of Urban Stormwater Capture for a Rain Ready California: Quantifying Economic Value and Advancing Resilience</i>  Joseph Draper CASQA	<b>PANEL</b> <i>Advancing Offsite Credit Trading in California – Progress and Challenges in Building State and Local Trading Capacity</i>  Panelists: Daniel Apt Olaunu	<i>New Metrics for Evaluating Hydrologic Performance of BMPs</i>  Elizabeth Fassman-Beck Southern California Coastal Water Research Project	<b>TRAINING WORKSHOP</b> <i>The New CGP - What Your Estimators Need to Know</i>  Speakers: Stacy Sinclair and Brittany Waddell Flatiron West, Inc.	<i>Contaminants of Emerging Concern in Urban Stormwater - San Francisco Bay Regional Monitoring Program Study Findings</i>  Thomas Mumley San Francisco Bay Regional Water Quality Control Board	<i>San Diego Bay IDEA! An Integrated Multi-Benefit Modeling Approach To Promote Sustainable and Climate Change Resilient Infrastructure</i>  Michelle Hallack Alegria City of San Diego	<i>Standardized Cost Reporting in Municipal Stormwater Permits – A Policy Update</i>  Nabiul Afrooz State Water Resources Control Board
11:30a - 11:55a	<i>Advanced Stormwater Capture in Disadvantaged Communities of the Lower Santa Clara River Watershed</i>  Hayley Luna County of Ventura	Jonathan Bishop State Water Resources Control Board  David Smith Water Innovation Services  Jeff Odefy One Water Econ	<i>GI in San Francisco - How's It Doing?</i>  Robert Dusenbury Lotus Water		<i>Screening California's Constituents of Emerging Concern Database for Stormwater, and Evaluating Potential Risks of Stormwater Infiltration</i>  Brandon Steets Geosyntec Consultants	<i>Meaningful, Collaborative, and Adaptive Watershed-Scale Planning with the Upper L.A. River's preSIP</i>  Chad Helmle Craftwater Engineering, Inc.	<i>Time Schedule Orders and Recent Applications to Stormwater Programs</i>  Paul Hartman Larry Walker Associates

11:55a - 1:30p **LUNCH** LOCATION: PARADISE TERRACE, SUNSET TERRACE, MISSION BAY PATIO, & EXECUTIVE LAWN (ATTENDEE'S CHOICE)

11:55a - 6:00p **EXHIBIT HALL OPEN** LOCATION: PARADISE BALLROOM AND FOYER

SESSION <b>2</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Funding	TRACK: BMP Effectiveness	TRACK: Construction General Permit	TRACK: Pollutants of Concern	TRACK: Modeling and Data Tools	TRACK: Regulatory and Legislation
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Judith Ibarra-Bianchetta Tetra Tech	Kelly Westover Stantec	Sandeep Bhonsle Keish Environmental	Kadi Whiteside Southern California Edison	Geremew Amenu Los Angeles County	Gabrielle Soto Environmental Resources Management	Chris Beegan State Water Resources Control Board
1:30p - 1:55p	<b>PANEL</b> <i>Keeping the "Green" in Green Streets: From Design, to Construction, to Maintenance, and Monitoring</i>  Panelists: Jason Wright Tetra Tech  Thuan Nguyen Los Angeles County	<i>Increasing Community Benefits and Grant Funding Opportunities Through Multi-Benefit Projects</i>  Melanie Rivera HDR Engineering, Inc.	<i>Implementation Challenges and Long-Term Effectiveness Assessment of a Multi-Use Wet Weather Flood Control and Dry Weather Natural Treatment System in the Cucamonga Creek Watershed</i>  Steve Wolosoff GEI Consultants	<i>CGP Enforcement and How To Navigate Through It, Los Angeles Regional Board</i>  Pavlova Vitale Los Angeles Regional Water Quality Control Board	<i>Where the Rubber Meets the Road: Tire Wear Particles and 6PPD-Quinone in Stormwater</i>  Heather Goss US EPA	<i>Development of a Sediment Recontamination Assessment Tool to Support Stormwater Management Planning</i>  Zahra Maleki Geosyntec Consultants	<b>TRAINING WORKSHOP</b> <i>Approach to Developing Site Specific Objectives for Zinc and Copper in Freshwaters of California</i>  Speakers: Adam Ryan and Eric Van Genderen International Zinc Association  Robert Santore Windward Environmental, LLC
2:00p - 2:25p	Andre Harris City of Los Angeles  Jason Casanova Council for Watershed Health	<i>What Next? How To Comply With the Federal Rules and Requirements Once You've Secured the Funding: San Diego Stormwater's Programmatic Plan for Complying With WIFIA Requirements</i>  Amy Broughton Stantec	<i>Guidance Versus Science: Nutrient Removal Effectiveness of Bioretention Basins in South Orange County</i>  Steven Bell CWE	<i>The Five Fundamentals of Effective Flocculation</i>  Kyla Wood Applied Polymer Systems, Inc.	<i>Clean Streets, Clean Seas: Stormwater BMPs to Intercept Microplastics in Urban Runoff</i>  Jill Murray City of Santa Barbara	<i>A Data-Driven Approach to Stormwater Management: Leveraging NOAA Forecast Weather Data for Optimal Outcomes</i>  Raul Garcia CloudCompli	

# MON SEP 11 CONTINUED

SESSION <b>3</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Outreach, Engagement, and Education	TRACK: BMP Effectiveness	TRACK: Construction General Permit	TRACK: Pollutants of Concern	TRACK: Modeling and Data Tools	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Shawn Kenney Woodard & Curran	Michal Helman WSP USA, Inc.	Dylan Ahearn Herrera Environmental Consultants	Lucy Cortez-Johnson Southern California Edison	Chris Sommers EOA, Inc.	Jill Bicknell EOA, Inc.	Alex Yescas HDR Engineering, Inc.
2:35p - 3:00p	<i>County of San Diego Green Infrastructure Program: From Masterplan to Implementation of Watershed Structural Projects</i>  Stephanie Gaines County of San Diego	<b>TRAINING WORKSHOP</b> <i>Surpassing Standards: A Tailored Approach to Outreach</i>  Speakers: Reed Alvarado WSP USA, Inc.  Dawn Petschauer City of Pasadena  Julie Millett Richard Watson & Associates, Inc.	<i>Designing Resilient Green Infrastructure To Treat Runoff From Wildfire-Affected Areas</i>  Sanjay Mohanty University of California Los Angeles	<b>PANEL</b> <i>QSDs, QSPs and ToRs – Sharing Insights on the 2022 CGP</i>  Panelists: Brandon Roosenboom State Water Resources Control Board  Sandy Mathews Larry Walker Associates	<i>The Significance of PFAS in Rain</i> Sarah Mass Haley & Aldrich	<i>Action Planning in Auckland New Zealand and Connections to California's Watershed Management Programs - Part 1: Water Quality Grading and BMP Opportunity Planning</i>  Hana Judd Morphum Environmental	<b>PANEL</b> <i>San Diego – A Race Against Time to Get it Done</i>  Panelists: Sara Dastgheibi and Sumer Hasenin City of San Diego  Leila Talebi HDR Engineering, Inc.
3:05p - 3:30p	<i>Upper Auburn Creek Revitalization</i>  Kristopher Eckert City of San Diego		<i>New Sediment Basin Design Standard Issued by the International Erosion Control Association</i>  Brian Free Applied Polymer Systems	Daniel Apt Olaunu  Melanie Sotelo CASC Engineering & Consulting	<i>PFAS &amp; Microplastics Lessons Learned from Wastewater Practitioners</i>  Jared Voskuhl California Association of Sanitation Agencies	<i>Action Planning...</i> continued  <i>- Part 2: Optimisation, Findings, and Looking Ahead</i>  John Riverson Paradigm Environmental	Ed Othmer Stantec

3:30p - 4:00p **BREAK** LOCATION: PARADISE BALLROOM AND FOYER Break and Exhibitor Focus

SESSION <b>4</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Outreach, Engagement, and Education	TRACK: Funding	TRACK: Construction General Permit	TRACK: Pollutants of Concern	TRACK: Regulatory and Legislation	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Shawn Kenney Woodard & Curran	Abigail Suter Riverside County Flood Control and Water Conservation District	John Bliss SCI Consulting Group	Kadi Whiteside Southern California Edison	Chris Sommers EOA, Inc.	Aldo Licitra Riverside County Flood Control and Water Conservation District	Peter Schultze-Allen EOA, Inc.
4:00p - 4:25p	<i>POST Media Development and the Park Place Stormwater Facility: A Low-Cost Novel Treatment Media and an Actively Dosed Regional Treatment Facility Design</i>  Chris Webb Herrera Environmental Consultants	 2023 CASQA Awardee - Outstanding Public Outreach / Engagement Project or Program  <i>Streets to Creeks: A Regional Approach To Rain-Ready Community Awareness and Action</i>  Nick Sudano City of Santa Rosa	<i>Data Collection From the Source – Leveraging Field Data to Improve Long Range Financial Forecasting</i>  Jillian Haynes City of San Diego	<i>Construction Stormwater – SWPPP Management: Cost Savings for Large Scale and Linear Projects Through BMP Implementation and Coordination</i>  Ethan Driscoll Bancroft Construction Services	<i>Bacteria Summit Next Steps – How Can the Stormwater Community Continue the Momentum?</i>  Ewelina Mutkowska CASQA	<i>Impacts of Litigation on MS4 Funding Sources</i>  John Michael Trapp Atkins Global	<i>Developing Watershed Management Programs in Ventura County</i>  Brianna Datti Craftwater Engineering, Inc.
4:30p - 4:55p	<i>Lake Okeechobee Watershed Restoration Project (LOWRP) ASR Well Program</i>  Nycole Sharma Stantec	<i>San Francisco Youth Watershed Stewards: Green Infrastructure Maintenance Partnership</i>  Kat Sawyer The Watershed Project	<i>Down the Drain? The City of San Diego's Approach to Making Storm Drain Replacement More Cost Effective</i>  Matthew Marientes City of San Diego	<i>The True Costs of Compliance: A Case Study</i>  Matthew Renaud NV5	<i>The Potential Impacts and Solutions of the Proposed Commercial, Industrial, and Institutional (CII) Stormwater Permit on Facilities within the Los Angeles and Long Beach Watersheds</i>  Chris Hsu GSI Environmental Inc.	<i>Unfunded Mandates</i>  Rebecca Andrews Best Best & Krieger LLP	<i>From IDEAs to a Rain Ready San Diego: Solving the Stormwater Planning Puzzle to get the Most Value Out of Your Capital Investment</i>  Sara Dastgheibi City of San Diego

4:55p - 6:00p **EXHIBITOR FOCUS** LOCATION: PARADISE BALLROOM AND FOYER

6:00p - 9:00p **NETWORKING EVENT** OFFSITE LOCATION: VACATION ISLE PARK - OUTSIDE AND WALKING DISTANCE NEXT DOOR TO PARADISE POINT Socialize after hours, enjoy food and entertainment, and continue the stormwater discussion (see next page for more details).

# Networking Event

**Vacation Isle Park**  
**Monday, Sep 11, 6-9pm**

Vacation Isle Park is outside and walking distance next door to Paradise Point. A unique opportunity to socialize after hours, enjoy food and entertainment, and continue the stormwater discussion (dinner; cash bar). Included with a Full Conference Pass.

Dress: Casual, jacket, comfortable shoes.

*Tickets are not available at the door.*



Courtesy of [gortsalsandiego.com](http://gortsalsandiego.com)



## Earn Professional Development Credits

Professional Development Verification forms are available at both CASQA Conference Services and the Registration Desk.

### 2023 Participating Organizations (pending approval of the conference program):

- Certified Erosion, Sediment and Stormwater Inspector (CESSWI)
- Certified Inspector Sediment and Erosion Control (CISEC)
- Certified Professional in Erosion and Sediment Control (CPESC)
- Certified Professional in Industrial Stormwater Management (CPISM)
- Certified Professional in Municipal Stormwater Management (CPMSM)
- Certified Professional in Stormwater Inspection (CPSWI)
- Certified Professional in Storm Water Quality (CPSWQ)
- California Water Environment Association (CWEA)
- Minimum Continuing Legal Education (MCLE)
- Professional Engineers (PE)



Photographer: Brand Larson

**LEARN MORE**  
[casqa.org/events/annual-conference/continuing-education](https://casqa.org/events/annual-conference/continuing-education)

# TUE SEP 12

7:30a - 8:30a	<b>COFFEE</b>	LOCATION: PARADISE BALLROOM Coffee and Refreshments
7:30a - 5:30p	<b>CONFERENCE SERVICES</b>	LOCATION: PARADISE FOYER Conference Services and Registration Desk
8:00a - 5:00p	<b>POSTER SESSION</b>	LOCATION: GARDEN FOYER
8:00a - 7:00p	<b>EXHIBIT HALL OPEN</b>	LOCATION: PARADISE BALLROOM AND FOYER

SESSION <b>5</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Outreach, Engagement, and Education	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Construction General Permit	TRACK: Monitoring and Special Studies	TRACK: Modeling and Data Tools	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	David Pohl Burns & McDonnell Engineering	Megan Otto Geosyntec Consultants	Kathleen McGowan McGowan Consulting	Melanie Sotelo CASC Engineering & Consulting	Zaida Aurora Cholico Santoya Larry Walker Associates	Rinta Perkins Geosyntec Consultants	Shawnetta Grandberry City of Carlsbad
8:30a - 8:55a	<i>A Framework to Develop Stormwater Capture Incentive Programs for Safe, Clean Water (and Other Co-Benefits) in Southern California</i> Brad Wardynski Craftwater Engineering, Inc.	<i>Adopt-a-Road Program</i> Michael Hill County of San Luis Obispo	<i>All the Tools in the Tool Box: Multi-Benefit Climate Adaptation Project Combines Sea Level Rise Protection Levee and Green Stormwater Infrastructure</i> Lucas Paz Terraphase Engineering	<b>TRAINING WORKSHOP</b> <i>2022 CGP Guidance: Map Tools and SMARTS</i> Speakers: Brandon Roosenboom and Matthew Shimizu State Water Resources Control Board	<i>Reducing Pathogen and Sediment Loading Through Large-Scale Stream Restoration</i> Aaron Nunez City of Santa Rosa	<i>A Catchment Pathogen Risk Prioritization Dashboard for the Newport Bay Watershed</i> Jian Peng County of Orange	<b>TRAINING WORKSHOP (SESSIONS 5-6)</b> <i>Basin Instincts: Municipal Program Management for Post-Construction BMP Compliance</i> Speakers: Nate Johnson, Nichole Fine, and Allison McLaughlin City of Carlsbad
9:00a - 9:25a	<i>An Argo-Naut Adventure: A Journey in Protecting and Collecting Water</i> Gordon Haines City of Los Angeles	<i>Compliance Achievement and Community Engagement through the Get It Done Program</i> Nicole Ridge City of San Diego	<i>Creating a Climate Resilient and Sustainable Tidal Marsh and Stormwater Capture System in Mission Bay, San Diego</i> Michelle Hallack Alegria City of San Diego		<i>Assessing the Impact of Season, Storms, and Berm Breaching on Recreational Water Quality at Three Southern CA Beaches</i> Jared Ervin Geosyntec Consultants	<i>Customized Web-Based Data Management and Tools for the City of Los Angeles' Stormwater Monitoring Programs</i> Travis Clark Tetra Tech	

SESSION <b>6</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Outreach, Engagement, and Education	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Construction General Permit	TRACK: Monitoring and Special Studies	TRACK: Modeling and Data Tools	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	David Pohl Burns & McDonnell Engineering	Tom Lawrence TLE PLLC	Raina Dwivedi Conservation and Natural Resources Group	Andrew Sidor Michael Baker International	Zaida Aurora Cholico Santoya Larry Walker Associates	Rinta Perkins Geosyntec Consultants	Shawnetta Grandberry City of Carlsbad
9:35a - 10:00a	<i>Enhancing Local Water Sustainability: Stormwater Capture and Use in San Diego</i> Maxwell Dugan Geosyntec Consultants	<i>Environmental Justice and the Impacts of Implementing Structural and Non-Structural BMPs in Underserved Communities</i> Jennifer Coryell Hazen and Sawyer	<i>Climate Resilience Through Flood Managed Aquifer Recharge</i> Ali Taghavi Woodard & Curran	<b>PANEL</b> <i>Ask the Regulators – Information Sharing on the 2022 CGP</i> Panelists: Brandon Roosenboom and Matthew Shimizu State Water Resources Control Board  Erica Ryan San Diego Regional Water Quality Control Board	<i>Assessing the Defecation Practices of Unsheltered Individuals and Their Contributions to Water Quality in an Arid, Urban Watershed</i> Juli Beth Hinds University of California San Diego	<i>Modelers on the Fly – Building Tools To Support Municipalities With Sustainable Stormwater Management in King County, WA</i> Olivia Wright Herrera Environmental Consultants	<b>TRAINING WORKSHOP</b> continued
10:05a - 10:30a	<i>Maple Canyon Phased Implementation - Drainage, Water Quality, Restoration, Etc!</i> Brendan Hastie Rick Engineering Company	<i>Protecting California's Water: Project Clean Water's Collaborative Campaign for Responsible Stormwater Protection and Collective Impact</i> Paige Copenhaver County of San Diego	<i>Addressing Drought Impacts and Water Sustainability: First Steps in San Diego County's Regional Water Equity Project</i> Megan Otto Geosyntec Consultants		<i>Achieving Bacteria Compliance in the Upper Los Angeles River Watershed Through a Human Health Risk-Based Approach</i> Brianna Datti Craftwater Engineering, Inc.	<i>Scaling Up the Utility of BMP Performance Assessments</i> Gary Conley 2NDNATURE	

# TUE SEP 12 CONTINUED

10:30a - 11:00a **BREAK** LOCATION: PARADISE BALLROOM AND FOYER  
Break and Exhibitor Focus

SESSION <b>7</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Outreach, Engagement, and Education	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Construction General Permit	TRACK: Monitoring and Special Studies	TRACK: Modeling and Data Tools	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Jim Rasmus Stantec	Tom Lawrence TLE PLLC	Heather Merenda City of Santa Clarita	Chris Ogaz CASC Engineering & Consulting	Roshan Christoph Sage Environmental Consulting	Elizabeth Zernik Environmental Resources Management	Ann Fletcher County of San Luis Obispo
11:00a - 11:25a	<b>PANEL</b> <i>Water Supplier's Perspectives on Urban Stormwater Capture and Use</i> Panelists: Jeff Mosher Santa Ana Watershed Project Authority Doug Campbell City of San Diego	<i>Resident Engagement as a Stormwater Operations Strategy for Trash Reduction</i> Jim Harry City of San Diego	<i>The Climate Resilience Resources Guide - Tools for Planning and Implementing Climate-Resilient Green Stormwater Infrastructure</i> Reid Bogert San Mateo Countywide Water Pollution Prevention Program	<i>Stormwater Capture and Management on a 5 Acre Construction Site</i> Daniel Secrist CASC Engineering & Consulting	<i>Enhanced Investigation of Wet Weather HF183 Contributions During a Historically Wet Year in San Diego County Catchments With OWTs</i> David Arthur WSP USA, Inc.	<i>How Can I Benefit From the Use of AI/Chat GPT Technologies in My Day-to-Day Stormwater Management Tasks?</i> Stella Shao GSI Environmental Inc.	<i>Streamlining MS4 Annual Reporting: SMC's Regional Framework and Platform</i> Dustin Bambic Paradigm Environmental
11:30a - 11:55a	Art Castro Los Angeles Department of Water and Power Sunny Wang City of Santa Monica	<i>The Good, The Bad, and The Bugly – Challenges in Applying CBSM to Pesticide Use Behaviors</i> Joey Schmitt Action Research	<i>Living with the Bay Program: A Resiliency Success Story</i> Michael Bomar Tetra Tech	<i>Stormwater Management at the San Diego International Airport New t1 Project</i> Harley Bachler Flatiron West, Inc.	<i>Novel Indicators for Tracking Human Sources of Fecal Pollution During Storm Events</i> Ken Schiff Southern California Coastal Water Research Project	<i>An Automated Open-Channel Encroachment Identification Model Based on Machine Learning in Los Angeles County</i> Jinshu Li Stantec	<i>Highlights and Insights of Washington State's Municipal Stormwater Permit Program</i> Abbey Stockwell Washington State Department of Ecology

11:55a - 1:30p **LUNCH** LOCATION: PARADISE TERRACE, SUNSET TERRACE, MISSION BAY PATIO, & EXECUTIVE LAWN (ATTENDEE'S CHOICE)

SESSION <b>8</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Equity and Environmental Justice	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Construction General Permit	TRACK: Pollutants of Concern	TRACK: Modeling and Data Tools	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Michelle Hoalton PACE Advanced Water Engineering	Tess Sprague Brown and Caldwell	Chad Praul Environmental Incentives	Chris Ogaz CASC Engineering & Consulting	Roshan Christoph Sage Environmental Consulting	Elizabeth Zernik Environmental Resources Management	Ann Fletcher County of San Luis Obispo
1:30p - 1:55p	<i>Infiltration Test Methods for Estimating the Capacity of Drywells</i> Scott Kindred Kindred Hydro, Inc.	<b>PANEL</b> <i>Equity Approaches in Climate Resilience and Nature-Based Solutions Planning in the Bay Area</i> Panelists: Reid Bogert San Mateo Countywide Water Pollution Prevention Program Rosey Jencks Brown and Caldwell Emily Corwin Solano Stormwater Alliance Cade Cannedy Climate Resilient Communities	<b>PANEL</b> <i>Stacking Incentives Adapts SoCal to Climate Change: A Learning Network Connecting Water Suppliers and Stormwater Departments</i> Panelists: Scott Norris County of San Diego Lisa Prus San Diego County Water Authority Justin Gamble City of Oceanside Krista Guerrero Metropolitan Water District of Southern California	<i>Rain Ready California</i> Jeanette Huddleston Sacramento County	<i>A New Trash Capture Device for Roadway Environments</i> Bhaskar Joshi California Department of Transportation	<i>Revolutionizing Stormwater Management With the Power of AI: Innovations and Opportunities</i> Josh Ungheanu CloudCompli	<i>Famosa Slough TMDL Compliance Achievement Through Code Enforcement</i> Kellyn Baker City of San Diego
2:00p - 2:25p	<i>Case Study: Sun Valley Infiltration Galleries Assessment and Expansion</i> Marty Spongberg WSP USA, Inc.			<i>Tailgate Talks – How this Tail Can Wag the Dog</i> Stacy Sinclair Flatiron West, Inc.	<i>Comparison and Discussion of Microplastic Hazard Thresholds As Assessed From Two Different Species Sensitivity Distribution Approaches</i> Kenia Whitehead GSI Environmental Inc.	<i>Rising Above the Waters: Building Resilient Communities through Cutting-Edge Flood Management Modeling in Southcrest, San Diego</i> Leila Talebi HDR Engineering, Inc.	<i>Analysis of Natural and Permitted Dry Weather Flows for Pollution Prevention</i> Matt Yeager Riverside County Flood Control and Water Conservation District

# TUE SEP 12 CONTINUED

SESSION <b>9</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Equity and Environmental Justice	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Industrial General Permit	TRACK: BMP Effectiveness	TRACK: Monitoring and Special Studies	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Michelle Hoalton PACE Advanced Water Engineering	Michelle Mattson Weston Solutions	Kathleen McGowan McGowan Consulting	Mehran Ebrahimi GSI Environmental Inc.	Brian Currier Office of Water Programs at Sacramento State	Rebekah Guill Riverside County Flood Control and Water Conservation District	Kelly Havens Geosyntec Consultants
2:35p - 3:00p	<i>Streamlining GI Feasibility Analysis within Planned Roadway Projects in the County of San Mateo</i>  Shauna Dunton Lotus Water	<i>How Large and Small Investments in Underserved Communities Work Together to Provide Multiple Stormwater and Community Benefits</i>  Sarah Favrot County of San Diego	<i>Can Life Cycle Analysis Make Low Impact Development More Sustainable?</i>  Kathy Hubbard Kleinfelder	<b>PANEL</b> <i>IGP Enforcement Trends &amp; Priorities</i>  Panelists: Pavlova Vitale Los Angeles Regional Water Quality Control Board Lauren Chase Orange County Coastkeeper Wayne Rosenabum Environmental Law Group LLP Jeffrey Longworth Earth & Water Law Timothy Simpson GSI Environmental Inc.	<i>Filter Fabric Mass Load Capacity and Long-Term Performance</i>  Craig Fairbaugh Contech Engineered Solutions	<i>Benthic Community Stressor Identification for Marine Sediments within the Rose Creek Estuary and Cudahy Creek Inlet Located in Mission Bay, San Diego, CA</i>  John Rudolph WSP USA, Inc.	<b>PANEL</b> <i>GSI Implementation in the San Francisco Bay Area – Challenges and Opportunities for a more Collaborative, Integrated, and Innovative Future</i>  Panelists: Amanda Booth City of San Pablo Pam Boyle Rodriguez City of Palo Alto Shannan Young City of Dublin Reid Bogert San Mateo Countywide Water Pollution Prevention Program
3:05p - 3:30p	 <b>2023 CASQA Awardee</b> - Outstanding Stormwater Capture and Use Implementation Project or Program <i>East Los Angeles Sustainable Medians Stormwater Capture Project</i>  Rafael Piamonte Los Angeles County	<i>Can Community Gardens Be Leveraged To Achieve Stormwater Capture and Water Quality Goals While Supporting Disadvantaged Communities?</i>  Gabriela Gonzalez WSP USA, Inc.	<i>Raise the Grade for Stormwater Infrastructure Using the Envision Sustainability Rating System Framework</i>  Suzanne Wilkins CDM Smith		<i>Stormwater Needs the Cloud - Optimizing Real-Time Maintenance Sensing in Stormwater Control Measures</i>  Jeremiah Lehman Contech Engineered Solutions	<i>Stressor Identification Case Study in Two Southern California Lagoons</i>  Sheila Holt Weston Solutions, Inc.	

3:30p - 4:00p **BREAK** LOCATION: PARADISE BALLROOM AND FOYER  
Break and Exhibitor Focus

SESSION <b>10</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Equity and Environmental Justice	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Industrial General Permit	TRACK: BMP Effectiveness	TRACK: Monitoring and Special Studies	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Paige Brue Watershed Progressive	Michelle Mattson Weston Solutions	Raina Dwivedi Conservation and Natural Resources Group	Gabrielle Soto Environmental Resources Management	Brian Currier Office of Water Programs at Sacramento State	Rebekah Guill Riverside County Flood Control and Water Conservation District	Erica Warren City of Sonoma
4:00p - 4:25p	<i>J. M. Pike Park, Protecting and Collecting Water for Modesto's Future</i>  Shawn Kenney Woodard & Curran	<i>Putting the "C" in CBP3 - RainCity Partnership</i>  Eric Zickler Lotus Water	<i>Stormwater Monitoring for Multi-Benefit Water Management</i>  Alex Messina WSP USA, Inc.	<i>Costs and Benefits of Implementing an Effective Stormwater Program</i>  Elliott Ripley Ashworth Leininger Group	<i>Street Sweeping Studies in the Pacific Northwest: Lessons Learned for Conventional Stormwater Pollutants and New Research Targeting Emerging Contaminants of Concern</i>  John Lenth Herrera Environmental Consultants	<i>Relationship Between Coliphage and Enterococcus at Southern California Beaches and Implications for Beach Water Quality Management</i>  John Griffith Southern California Coastal Water Research Project	<i>Gravel Surface (Im)perviousness – Where We're at, and Where We're Heading</i>  Patrick Kuga Michael Baker International
4:30p - 4:55p	<i>Scotts Valley: Harnessing Stormwater for Groundwater Recharge and Water Supply</i>  Sachiko Itagaki Kennedy Jenks Consultants	<i>Tijuana River Pollution Crisis</i>  Chris Helmer City of Imperial Beach	<i>Building Adaptation Capacity through Resilient Schoolyards in San Mateo County</i>  Reid Bogert San Mateo Countywide Water Pollution Prevention Program	<i>Top Five Data Management Pitfalls for IGP Compliance and How to Strategically Navigate Data and Reporting to Reach Compliance Goals</i>  Becky Chen GSI Environmental Inc.	<i>Managing Street Sweeping for Stormwater Quality Benefits</i>  Gary Conley 2NDNATURE	<i>Environmental Forensics: An Adaptive, Iterative Approach to Pathogen Source Detection in Sonoma County</i>  Alisa Keenan County of Sonoma	<i>Catch Basin Maintenance - The Unsung Hero</i>  Michael Roberts City of Riverside

5:00p - 7:00p **EXHIBITOR RECEPTION** LOCATION: PARADISE BALLROOM AND FOYER  
Exhibitors and conference attendees always enjoy a chance to interface in this cordial and relaxed environment (appetizers; cash bar).

# WED SEP 13

7:30a - 8:30a **COFFEE** LOCATION: PARADISE BALLROOM  
Coffee and Refreshments

7:30a - 2:30p **CONFERENCE SERVICES** LOCATION: PARADISE FOYER  
Conference Services and Registration Desk

8:00a - 12:10p **EXHIBIT HALL OPEN** LOCATION: PARADISE BALLROOM AND FOYER

8:00a - 1:30p **POSTER SESSION** LOCATION: GARDEN FOYER

SESSION <b>11</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Looking Beyond California	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Industrial General Permit	TRACK: BMP Effectiveness	TRACK: Monitoring and Special Studies	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Shannon Spurlock Pacific Institute	Brenda Ponton Woodard & Curran	Grant Sharp County of Orange	Mehran Ebrahimi GSI Environmental Inc.	Fred Gonzalez Los Angeles County	Cynthia Gabaldon CG Resource Management and Engineering, Inc.	Erin Maker City of Carpinteria
8:30a - 8:55a	<b>PANEL</b> <i>Lessons and Insights From a National Assessment of Stormwater Capture Potential – Barriers, Drivers, and Regional Partnerships</i> Panelists: David Smith Water Innovation Services Nicole Beck 2NDNATURE Shannon Spurlock Pacific Institute	<i>How to Avoid Green Elephants: Governance as a Driver for Resilient Green Infrastructure</i> Jennifer Court GHD	<b>PANEL</b> <i>Data-Driven Exploration of Stormwater Capture and Water Reuse Partnership Opportunities</i> Panelists: Daniel Apt Olaunu Laura Rocha Moulton Niguel Water District	<b>TRAINING WORKSHOP (SESSIONS 11-12)</b> <i>Recent Developments and Best Practices for Industrial Stormwater Infiltration</i> Speakers: Pavlova Vitale Los Angeles Regional Water Quality Control Board Brandon Steets Geosyntec Consultants Amanda Magee and Pushpa Zachariah State Water Resources Control Board Mehran Ebrahimi GSI Environmental Inc.	<i>Effectiveness of Turf-Replacement BMPs to Minimize Wet Weather and Irrigation-Induced Dry Weather Runoff</i> Edward Tiernan Southern California Coastal Water Research Project	<i>Street Sweeping's Role in Achieving Full Capture System Equivalency Targets in California – Development of Local Metrics in the City of Stockton</i> Danielle Moss Larry Walker Associates	<i>Getting Ready to Report Municipal Stormwater Program Costs: A Framework and Methodology for the San Francisco Bay Area</i> Jill Bicknell EOA, Inc.
9:00a - 9:25a		<i>Follow the Drop: An Innovative Tool and Public-Private-Philanthropic Partnership for Community Engagement in Honolulu, HI</i> Lauren Roth Venu 3Rwater			<i>Floating Treatment Wetlands as a Cost-Effective, Nature-Based Solution To Increase Ecosystem Services in Urban Waters and Stormwater Ponds</i> Rob Zisette Herrera Environmental Consultants	<i>It's Required but Is It Effective? A Study To Test the Efficacy of the Permit Required In/Comm Program</i> Nadine Young Evans City of San Diego	<i>Getting Ready to Invest - Incorporating Community, Climate, and Condition into the City of San Diego's Integrated Planning Process</i> Kevin Anub City of San Diego

SESSION <b>12</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Looking Beyond California	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Industrial General Permit	TRACK: BMP Effectiveness	TRACK: Monitoring and Special Studies	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Daniel Apt Olaunu	Brenda Ponton Woodard & Curran	Michael Drennan NV5	Mehran Ebrahimi GSI Environmental Inc.	Fred Gonzalez Los Angeles County	Vicki Kalkirtz City of San Diego	Peter Schultze-Allen EOA, Inc.
9:35a - 10:00a	<b>PANEL</b> <i>Watershed and Integrated Water Resources Project Planning in South Orange County</i> Panelists: Cindy Rivers County of Orange Aaron Poresky and Stephanie Zinn Geosyntec Consultants Kari Schumaker Sunkist Solutions, LLC	<i>Building Resiliency, Community and Ecologic Diversity in a Historic City: Flood Mitigation &amp; Placemaking in Quincy, MA</i> David White Woodard & Curran	<i>Climate Change Implications for BMP Design</i> Afshin Shabani Tetra Tech	<b>TRAINING WORKSHOP</b> continued	<i>A Pollutant Load Reduction Based Framework for Assessing Equivalency of Conventional Bioretention and High Rate Biofiltration Systems</i> Vaikko Allen Contech Engineered Solutions	<i>Regional Assessment of Watershed Trash and Marine Debris in Southern California</i> Ken Schiff Southern California Coastal Water Research Project	<b>PANEL</b> <i>Unhoused Populations and Water Quality Impacts: Municipal Best Management Practices From the Bay Area and San Diego</i> Panelists: Vishakha Atre EOA, Inc.
10:05a - 10:30a			<i>Stormwater Practitioners Are the New Sustainability Leaders</i> Chris Helmer City of Imperial Beach		<i>The Race to the Bottom: How BMP Manufacturers Building Progressively Smaller Filters is Impacting our Waterways</i> Dylan Ahearn Herrera Environmental Consultants	<i>Comparison of Pre vs Post Wildfire Stormwater Quality and Time to Recovery</i> Maia Colyar Geosyntec Consultants	Nicole Wilson Larry Walker Associates Megan Welsh Carroll San Diego State University

# WED SEP 13 CONTINUED

10:30a - 11:15a

## BREAK, PRIZE DRAWING

LOCATION: PARADISE BALLROOM AND FOYER  
Break, Exhibitor Focus and Prize Drawing\*  
Winners will be announced by the Platinum Stormwater Steward (Rick Engineering Company). (\*Must be present to win)

SESSION <b>13</b>	TRACK: Stormwater Capture, Use, Green Infrastructure, and Nature-Based Solutions	TRACK: Funding	TRACK: Climate Change, Resiliency, and Sustainability	TRACK: Industrial General Permit	TRACK: BMP Effectiveness	TRACK: Monitoring and Special Studies	TRACK: Municipal Programs
ROOM	MISSION BAY ROOM	GARDEN ROOM	DOCKSIDE ROOM	SUNSET BALLROOM I & II	SUNSET BALLROOM III	SUNSET BALLROOM IV	SUNSET BALLROOM V
MODERATOR	Stephanie Gaines County of San Diego	Matthew Lentz GSI Environmental Inc.	Michael Drennan NV5	Laura Carpenter Brown of Caldwell	Cynthia Gabaldon CG Resource Management and Engineering, Inc.	Vicki Kalkirtz City of San Diego	Erin Maker City of Carpinteria
11:15a - 11:40a	<i>Via Princessa Regional Park and BMP Project</i>  Duong Do PACE Advanced Water Engineering	<b>PANEL</b> <i>An Innovative Approach to Generate Funding and Promote Stormwater Capture and Use: Anaheim's Stormwater Credit Program</i>  Panelists: Keith Linker City of Anaheim Daniel Apt Olauanu Richard Haimann Sustura, Inc. Mike Recupero Recupero and Associates	<i>Beyond Stormwater: A Novel Watershed Plan That Balances Water Quality Improvement, Community Benefits, Climate Change Resiliency, and Flood Control</i>  Lara Barrett County of San Diego	<i>Let's Play Kick the Can! Delayed Planning for Achieving TNAL and NEL Compliance Can and Will Be Painful!</i>  David Renfrew NV5	<i>STEPP National Stormwater Treatment Test Program</i>  Jay Holtz Oldcastle Infrastructure	<i>Integrative Approaches to Reducing Residential Dry Weather Runoff</i>  Mai Son Riverside County Flood Control and Water Conservation District	<i>Source Investigations and Inspections to Reduce Trash in an Underserved Community</i>  John Quenzer D-Max Engineering
11:45a - 12:10p	<i>Balancing Stormwater and Community: Implementation of a Unique Park Flood Mitigation and Water Quality Project in the Town of Windsor</i>  Nathan Towleron GHD		<i>WSDOT's Innovative, Nature-Based Approach for Simultaneous Stormwater Flow and Stream Mitigation Within an Interstate Corridor</i>  Christina Merten Herrera Environmental Consultants	<i>Moving Back to Baseline and Lessons Learned for the Second Year - Applying Bench-Scale Testing to Identify Characteristics of Stormwater Pollutants and Improve Advanced Treatment</i>  Blake Van Drimlen GSI Environmental Inc.	<i>Under What Conditions Are Trash Full Capture Systems Impracticable? - Guidance From the SF Bay Area Based on Over a Decade of Installation</i>  Chris Sommers EOA, Inc.	<i>Using Statistical Correlations of Monitoring Data Parameters and Variations With Flow Rates for More Effective Stormwater Management</i>  Gaurav Rajen Santa Ana Regional Water Quality Control Board	<i>Regional Trash Capture Implementation in the San Diego Region Snapshot</i>  Anthony Cotts Rick Engineering Company

12:10p - 1:30p

## LUNCH

LOCATION: PARADISE TERRACE, SUNSET TERRACE, MISSION BAY PATIO, & EXECUTIVE LAWN (ATTENDEE'S CHOICE)

1:30p - 2:30p

## CAPSTONE SESSION

LOCATION: PARADISE TERRACE  
Invited panel of leaders. For all attendees. (Capstone Session Sponsor: HDR Engineering, Inc.)

### Capstone Session

New this year, this event will close the conference, featuring leaders from various water sectors throughout California engaged in conversations about achieving a *Rain Ready California*.



**Karen Cowan**  
Executive Director  
CASQA



**Adam Link**  
Executive Director  
California Association  
of Sanitation Agencies  
(CASA)



**Sean Maguire**  
Board Member  
State Water Resources  
Control Board



**Anna Naimark**  
Deputy Secretary and  
Special Counsel for Water  
California Environmental  
Protection Agency  
(CalEPA)



**Jennifer West**  
Managing Director  
WateReuse  
California

# MEMBER OF THE CALIFORNIA STORMWATER QUALITY ASSOCIATION



CFS HAS INSTALLED LOW IMPACT DEVELOPMENT STORMWATER SOLUTIONS AT OVER 300 PROJECTS ACROSS THE WESTERN UNITED STATES!



OUR LOW IMPACT DEVELOPMENT SOLUTIONS WILL REDUCE YOUR STORMWATER COSTS BY AT LEAST 50%!



640 Alpine Way, Escondido, CA 92029  
Phone: (858) 705-6483  
Email: [info@CAfiltrationspecialists.com](mailto:info@CAfiltrationspecialists.com)  
[www.californiafiltrationspecialists.com](http://www.californiafiltrationspecialists.com)

## CALIFORNIA FILTRATION SPECIALISTS OFFERS:

- FOUR 100% PERMEABLE SURFACING SOLUTIONS
- FOUR STORMWATER STORAGE SYSTEMS
- THREE HIGH-FLOW BIOFILTRATION SYSTEMS (ONE IS TAPE GULD CERTIFIED)
- MULTIPLE FILTRATION AND TRASH ELIMINATION SYSTEMS (INDUSTRIAL SOLUTIONS)

**VISIT US AT  
BOOTH 16**

**VISIT OUR WEBSITE TO  
LEARN ABOUT OUR SUITE  
OF STORMWATER  
SOLUTIONS**





## Living our passion for client satisfaction

### What We Do

Ready to help clients face environmental changes by strengthening what is already in place with practical and sustainable solutions.

- ✓ Water • Environment • Transportation • Energy and Facilities
- ✓ Consulting • Design • Construction • Program Management
- ✓ State Agencies • Federal Government • Industry • Municipal Government



**Proud History.  
Bold Future.**

Providing solutions with exceptional client service.



NETWORKING EVENT SPONSOR ^



## Stormwater Planning, Analysis, and Design

Dudek engineering and environmental professionals provide solutions to meet your stormwater challenges.

- ▲ Strategic Planning
- ▲ Water Quality Analysis
- ▲ Stormwater Facility Design
- ▲ Regulatory Permitting
- ▲ Flood Mapping & Analysis
- ▲ Environmental Services
- ▲ Stream Restoration
- ▲ Coastal Planning
- ▲ Lake & Pond Design
- ▲ Construction Services

*Scan the QR code to learn more about our solutions for stormwater projects*



NETWORKING EVENT SPONSOR ^

# STORMWATER SERVICES

- Stormwater Pollution Prevention Plans (SWPPPs)
- Stormwater Best Management Practices (BMPs)
- Stormwater Management Design/ Flood Mitigation
- Stormwater Sampling and Analysis
- Auto-sampling Equipment, Flow Monitoring, Long Term Data Logging
- Data Assessment and Annual Report Preparation
- Erosion Control Plans/Compliance Assessments
- Hydrologic Modeling
- Laboratory Support, Planning, Review, Data Assessment and Validation
- Commercial/Industrial Inspections
- Construction Inspections and BMP
- Weather Forecasting, Tracking, and Rainfall Assessments for Stormwater Compliance

PROUD MEMBER OF  
**CALIFORNIA STORMWATER QUALITY ASSOCIATION**

**NV5.COM | ENVIRONMENTAL@NV5.COM**

NETWORKING EVENT SPONSOR ^

## Our reason is water.

**At ADS, we believe in advancing quality of life through sustainable solutions to water management challenges.**

As one of the largest plastic recycling companies in North America, we recycle over 500 million pounds of plastic every year.

To learn more visit us at **Booth 20** or go to [adspipe.com](http://adspipe.com)

© 2023 Advanced Drainage Systems, Inc. 7/23 CS



## Industrial Stormwater Treatment

Clear Creek Systems is a leading provider of stormwater treatment systems for permitted industrial facilities. We have experience assisting clients with determining the best-fit water treatment system for each facility and its operations. Clear Creek has the knowledge, personnel, and equipment to provide treatment for any pollutant at any concentration. Clear Creek works collaboratively with all interested parties to provide treatment solutions that will reliably meet your permit requirements. Clear Creek will deliver the correct treatment system, designed specifically for your facility.

- Mechanical filtration (sand, bag, or cartridge)
- Mixed media filtration
- Polymer treatment
- Chemically enhanced sand filtration
- Automated pH correction
- Passive adsorption systems
- Pressurized adsorption systems
- Mobile monitoring, remote operations, and SCADA support

## About Clear Creek Systems

Clear Creek Systems has over 25 years experience in Industrial Stormwater Treatment, and we have a team of knowledgeable professionals that help design solutions for each project.

We're a leading water technology company, specializing in the treatment of groundwater, stormwater construction dewatering, industrial process water, PFAS and other hard to treat sources. Clear Creek has been a pioneer in providing turn-key services, including design, build, install & operation. Our experience using a range of water treatment technologies allows us to provide customers across the USA with both custom and cost-effective solutions.

### WORKING WITH:

- Marine Facilities
- Timber Processing
- Metal Recycling
- Manufacturing
- Transportation Facilities
- Solid Waste
- Equipment Rental Yards
- Shipping
- Port Facilities
- Sand & Gravel
- Aerospace
- Industrial Facilities

For more information, contact:

**877-324-9634**

**Sales@clearcreeksystems.com**

**clearcreeksystems.com**



**Seattle - Washington**  
140 County Line Rd - SW Suite 101  
Pacific, WA 98047  
206-695-2120

**Eastern US - Canada**  
202 Adam Smith St.  
Eldersburg, MD 21784  
530-554-8848

**Northern California**  
1175 Greenville Road  
Livermore, CA 94550  
925-273-9896

**Southern California - Arizona**  
4101 Union Ave.  
Bakersfield, CA 93305  
661-324-9634

**Midwest**  
2429 Notting Hill Road  
Toledo, Ohio 43617  
419-346-8848

**Oregon -SW Washington**  
6457 N.E. Columbia Blvd  
Portland, OR 97218  
360-605-3264

# Poster Presentations

Posters will be displayed throughout the conference in the Garden Foyer.

The poster authors will be available to answer questions during the Monday morning break.

---

 2023 CASQA Awardee - Outstanding Stormwater Science Project or Program: Student: Analysis of Water Quality Near Areas of Homeless Activity on Santa Rosa Creek and Russell Creek

*Claudia Mayo, Sonoma State University*

---

A Case Study of Atmospheric Susceptibility to Wildfire Ignition and Growth Following Historically Wet Seasons in California

*Nick Modar, Weston Solutions*

---

Augmenting and Refining Traditional Sediment Toxicity Identification Evaluations in a Stressor Identification Special Study for Management of Potentially Impacted Sediments Under the San Diego MS4 Permit

*Peter Arth, Enthalpy Analytical LLC*

---

Bacteria TMDL Monitoring: A Decade of Collaboration in San Diego

*Jose Calderon, WSP USA, Inc.*

---

Ballona Wetlands Remove Contaminants From Municipal Runoff: An Ecological Sink for Enterococcus

*Annalia Henderson, Palos Verdes High School*

---

BMPs Bring a Wide Range of Benefits Beyond Water Quality

*Tony Sidor, CASC Engineering & Consulting*

---

California's New Climate Reality-Drought or Deluge Weather Whiplash

*Garth Engelhorn, NV5*

---

---

California's Recent Heavy Rains Do Not Mean the End of Drought: The Urgent Need for an Effective Drought Contingency Plan  
*Kiran Pallachulla, NV5*

---

Call to Action: Educational Opportunities for Future Storm Water Professionals

*Connor Ridge, Flatiron*

---

Climate Change, Resiliency and Sustainability in the 1-5 North Coast Corridor

*Violet Quinn, Flatiron*

---

Cost Implications and Potential Implementation Challenges of the Newly Adopted 2022 Construction General Permit

*Alexandra Aranha, EKI Environment & Water*

---

Dealing With Extreme Weather Conditions Using Innovative BMPs and Controls

*Neftali Romero, Geosyntec Consultants*

---

Hydromodification Within High Groundwater - Project Bruin, Oxnard, CA

*Terence Zhao, Advanced Drainage Systems*

---

Long Term Monitoring of Stormwater Water Quality in the Cache Slough Watershed (2010-2023)

*Jennifer Repa, Terraphase Engineering*

---

Managing a Municipal Stormwater Inspection Program using ArcGIS Online

*Michael Beerends, GHD*

---

Modeling of Circular Geometries in Outlet Structures

*Anthony Cotts, Rick Engineering Company*

---

---

Reinventing Road-Side Biofilter Design To Increase Their Climate Resilience

*Tony Das, University of California Los Angeles*

---

Risk of Gastrointestinal Illness in a Polluted Tropical Beach

*Adriana González Fernández, Southern California Coastal Water Research Project*

---

Serving the Underserved an Exhaustive Translation of Materials in Eight Languages

*Nick del Valle, County of San Diego*

---

State Route 74 Ortega Highway/Cow Camp Road Intersection Project and Preparing a Storm Water Data Report for Design Engineering Evaluation Report (DEER) Phase

*Jacqueline Stone, Michael Baker International*

---

Stormwater Capture to Enhance Water Resiliency and Sustainability

*Masih Bari, Atkins North America*

---

Stormwater Operation and Maintenance Agreements – Setting Up for Success

*Anthony Schuetze, County of San Luis Obispo*

---

Surface Water Remediation Using Floating Island Technology

*Nate Hasal, GSI Environmental Inc.*

---

The TMDL Framework for Phosphorus Management in Shahe River SubWatershed, Chaohu Lake, China

*Jian Peng, County of Orange*

---



## Stormwater Management Services

Trash, debris and other pollutants discharge every day in storm drains that lead to our oceans. We can control these pollutants by stopping them at the source with filters and proper maintenance. Geo4 installs, cleans and maintains storm drains, as well assists you in complying with city regulations and requirements.

### Maintenance Services

- Maintenance and Inspection
- Filter Sales and Installation
- Repairs and Media Replacement
- Trash Screens
- Modular Wetland Systems
- CDS Vaults
- Media Storm Filters
- Bioretention systems
- SWPPP and QSP Services
- Spill Kits
- Stormwater Training

[geo4services.com](http://geo4services.com)



CONTACT US TODAY FOR A COMPLIMENTARY SITE ASSESSMENT!



**Green Infrastructure  
Solutions**



**Treatment  
Solutions**



**Deep Infiltration  
Solutions**



**Detention  
Solutions**



Speak to one of our  
stormwater experts today

**Booth #11**

# reign the rain

Stormwater infrastructure solutions that meet your specifications. And beyond.

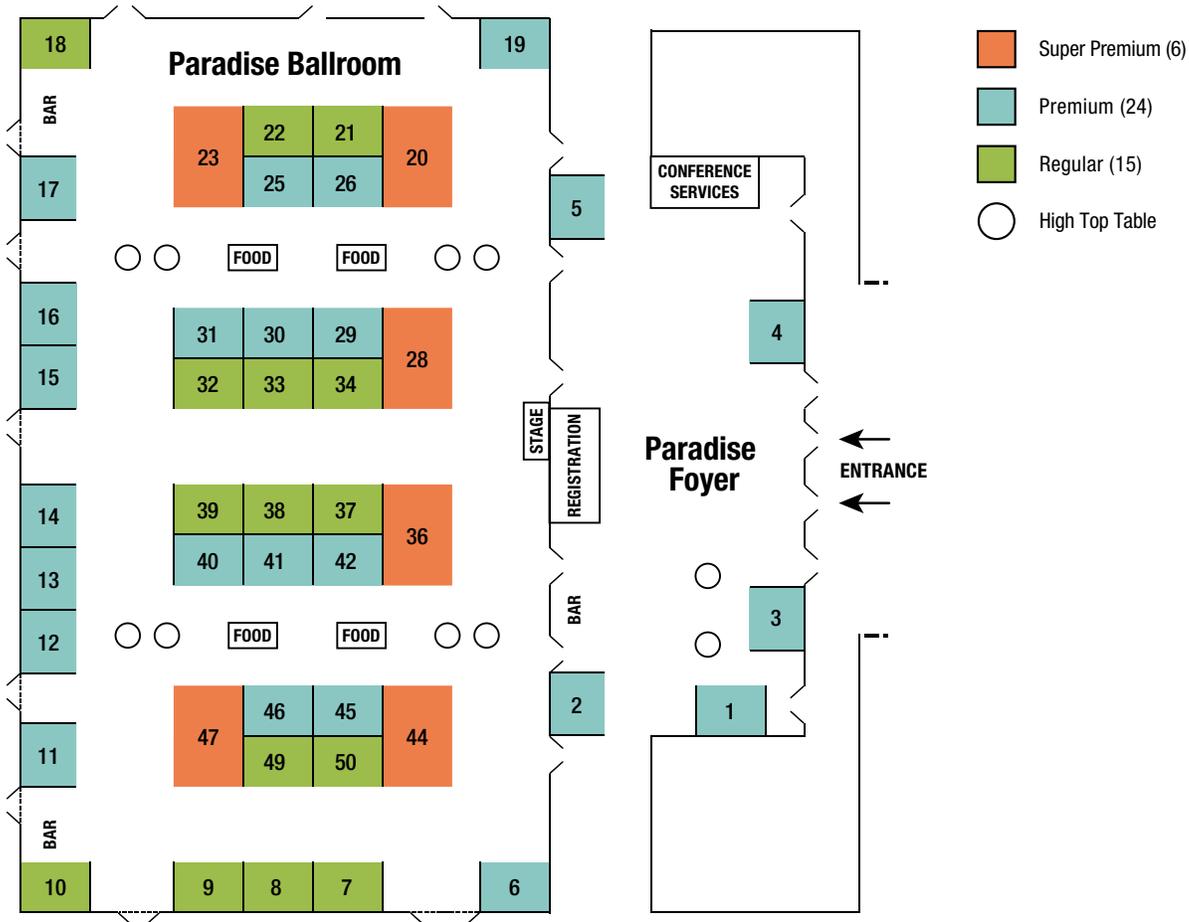
When it comes to total stormwater management, how you control and guide each drop will depend on how well your stormwater systems are working together. No matter your site-specific stormwater need, Oldcastle Infrastructure has a management solution to address the challenge. From early design and engineering support to manufacturing and maintenance, we've got you covered to help you reign the rain.

**Trusted partnerships.**  
**Full scale solutions.**

[oldcastleinfrastructure.com/stormwater-solutions](http://oldcastleinfrastructure.com/stormwater-solutions)

# Exhibit Hall Map

Exhibit Hall Location: Paradise Ballroom and Foyer



## Exhibit Hall Hours

### Monday, September 11

Exhibit Hall Open . . . . . 11:55 am – 6:00 pm  
 Break & Exhibitor Focus . . . . . 3:30 pm – 4:00 pm  
 Exhibitor Focus . . . . . 4:55 pm – 6:00 pm

### Tuesday, September 12

Exhibit Hall Open . . . . . 8:00 am – 7:00 pm  
 Break & Exhibitor Focus . . . . . 10:30 am – 11:00 am  
 Break & Exhibitor Focus . . . . . 3:30 pm – 4:00 pm  
 Exhibitor Reception . . . . . 5:00 pm – 7:00 pm

### Wednesday, September 13

Exhibit Hall Open . . . . . 8:00 am – 12:10 pm  
 Break, Exhibitor Focus & Prize Drawing . . 10:30 am – 11:15 am



Photographer: Rand Larson

# Exhibitors

 Super Premium Exhibitor

 Premium Exhibitor

 Regular Exhibitor

## BOOTH #

<b>20</b>	<b>Advanced Drainage Systems, Inc.</b> Terence Zhao terence.zhao@adspipe.com www.adspipe.com	<b>1</b>	<b>County of San Diego</b> watersheds@sdcounty.ca.gov www.sandiegocounty.gov/content/sdc/dpw/watersheds	<b>13</b>	<b>Triverus, LLC</b> Hans Vogel Hvogel@triverus.com www.Triverus.com
<b>23</b>	<b>Pre-Con Products</b> James Mayer jmayer@pre-conproducts.com www.preconproducts.com	<b>2</b>	<b>Porous Technologies, LLC</b> Gregg Novick gnovick@lidtech.com www.stormcrete.com	<b>14</b>	<b>ABT, Inc. – Permavoid</b> Brad Short bshort@abtdrains.com www.abtdrains.com
<b>28</b>	<b>Jensen Water Resources</b> John Scott jscott@jensenprecast.com www.jensenprecast.com	<b>3</b>	<b>Enviropod, Inc.</b> Will Harris Will@enviropod.com www.enviropod.com	<b>15</b>	<b>United Storm Water, Inc.</b> Lydia Perry lydia@unitedstormwater.com www.unitedstormwater.com
<b>36</b>	<b>Contech Engineered Solutions</b> Jill Black Jill.Black@conteches.com www.Conteches.com	<b>4</b>	<b>Clear Creek Systems, Inc.</b> Jayson Samuli jsamuli@clearcreeksystems.com www.clearcreeksystems.com	<b>16</b>	<b>California Filtration Specialists, LLC</b> Mitch Whitson mitch@cafiltrationspecialists.com www.californiafiltrationspecialists.com
<b>44</b>	<b>Downstream Services, Inc.</b> Loren Roberts lorenr@downstreamservices.com www.downstreamservices.com	<b>5</b>	<b>Stormwater Biochar, LLC</b> Ryan Holman ryan@stormwaterbiochar.com www.StormwaterBIOCHAR.com	<b>17</b>	<b>FODS, LLC</b> Chloe Moretz cmoretz@getfods.com www.getfods.com
<b>47</b>	<b>CloudCompli, Inc.</b> Aimee Grove aimee@cloudcompli.com www.cloudcompli.com	<b>6</b>	<b>LSC Environmental Products, LLC</b> Tyler Palmer tpalmer@lscenv.com www.lscenv.com	<b>19</b>	<b>XERXES</b> Dave Holmes david.holmes@shawcor.com www.xerxes.com/en/
		<b>11</b>	<b>Oldcastle Infrastructure</b> Nick Huston nick.huston@oldcastle.com www.oldcastleinfrastructure.com	<b>25</b>	<b>StormTrap</b> Charlie Carter ccarter@stormtrap.com www.stormtrap.com
		<b>12</b>	<b>Layfield USA</b> Jan Nichols jan.nichols@layfieldgroup.com www.layfieldgroup.com	<b>26</b>	<b>Frog Creek Partners</b> Brian Deurloo brian@frogcreek.partners www.frogcreek.partners

# Exhibitors CONTINUED

## BOOTH #

<b>29</b>	<b>Pacific Advanced Civil Engineering, Inc. (PACE)</b>  Michelle Hoalton mhoalton@pacewater.com www.pacewater.com	<b>7</b>	<b>Angelus Block Co., Inc.</b>  David Quinn dquinn@angelusblock.com www.angeluspavingstones.com	<b>33</b>	<b>Core &amp; Main Geosynthetics</b>  John Oldenburger III John.OldenburgerIII@coreandmain.com www.coreandmain.com/what-we-do/ geosynthetics
<b>30</b>	<b>2NDNATURE Software</b>  Kyle Bergerson kyle.bergerson@2ndnaturewater.com www.2ndnaturewater.com	<b>8</b>	<b>Faircloth Skimmer</b>  Brian Free bfree@fairclothskimmer.com www.FairclothSkimmer.com	<b>34</b>	<b>WaterTectonics</b>  TJ Mothersbaugh tj.mothersbaugh@watertectonics.com www.watertectonics.com
<b>31</b>	<b>Applied Polymer Systems, Inc.</b>  Kyla Wood kylajaynewood@gmail.com www.siltstop.com	<b>9</b>	<b>Hydro International Ltd.</b>  Phil O'Neill poneill@hydro-int.com www.hydro-int.com/en	<b>37</b>	<b>Moleaer</b>  Jenn Fisher jenn.fisher@moleaer.com www.moleaer.com
<b>40</b>	<b>CULTEC</b>  Cameron Brown Cameron.Brown@cultec.com www.cultec.com	<b>10</b>	<b>Profile Products</b>  Danny Reynaga dreynaga@profileproducts.com www.profileevs.com	<b>38</b>	<b>ERTEC Environmental Systems</b>  Joe Sherratt jsherratt@ertecsystems.com www.ertecsystems.com
<b>41</b>	<b>Storm Water Inspection &amp; Maintenance Services (SWIMS)</b>  Ethan Purkey ethan@swimsclean.com www.swimsclean.com	<b>18</b>	<b>EnviroCert International, Inc.</b>  Melissa McKinney mmckinney@envirocert.org www.envirocert.org	<b>39</b>	<b>DeepRoot Green Infrastructure</b>  Shawn Freedberg shawn@deeproot.com www.deeproot.com
<b>42</b>	<b>AquaShield, Inc.</b>  John Santos jsantos@aquashieldinc.com www.aquashieldinc.com	<b>21</b>	<b>Titan Environmental</b>  Miranda Koshman miranda@titanenviro.ca www.titanenviro.com	<b>49</b>	<b>Gullywasher Stormwater Filters</b>  Jeff Pettey jeff@gullywasher.com www.gullywasher.com
<b>45</b>	<b>Soil Retention Products, Inc.</b>  Nick Jansson njansson@soilretention.com www.soilretention.com	<b>22</b>	<b>AbTech Industries, Inc.</b>  Laddie Fromelius lfromelius@abtechindustries.com www.abtechindustries.com	<b>50</b>	<b>Trihydro</b>  Yolonda Wright ywright@trihydro.com www.trihydro.com
<b>46</b>	<b>Ferguson Waterworks</b>  Pat Murphy patrick.murphy@ferguson.com www.FergusonGSS.com	<b>32</b>	<b>Clear Water Services</b>  Nick Martinez Nick.Martinez@clearwaterservices.com www.clearwaterservices.com		



## Exhibitor Prize Drawing

Submit completed card by: **Wednesday, 9:00 am**

To be entered into the Exhibitor Prize Drawing visit at least 10 booths and obtain a representative signature on the prize drawing card provided in your attendee packet. Complete the card and drop it off at the CASQA Registration Desk.

Drawing will be held: **Wednesday, 10:30 am**

The drawing will be held during the Wednesday morning break in the Exhibit Hall (Paradise Ballroom). You must be present to win.

# CASQA Staff, Board, & Subcommittees

## Board of Directors

Dalia Fadl, *Chair*  
Rob Carson, *Vice-Chair*  
Richard Boon, *Treasurer*  
Amanda Carr, *Secretary*  
Ashli Desai  
Ann Fletcher  
James Scanlin  
Chris Sommers  
Melanie Sotelo  
Christine Tolchin  
Jalaine Q. Verdiner

## CASQA Staff

### Executive Director

Karen Cowan

### Program Manager

Joseph Draper

### Program Manager

Ewelina Mutkowska

### Events and Website Manager

Amy Porter

### Administrative Manager

Cheryl McCullough

## Subcommittee Co-Chairs

### BMP Effectiveness Assessment

Frank Cheng, Matt Yeager

### BMP Handbooks

Kadi Whiteside, John Heltzel

### Conference

Andrea Crumpacker, Tanya Bilezikjian

### Construction

Andrew Sidor, Lucy Cortez-Johnson

### Engagement and Education

Jeanette Huddleston, Taraneh Nik-Khah

### Funding

Daniel Apt, Kelly Westover

### Industrial

Fulbert Chan, Mehran Ebrahimi

### Legislation

Darcy Kuenzi, Hawkeye Sheene

### Monitoring and Science

Bonnie de Berry, Jian Peng

### Non-Traditional Phase II

Angela Clapp, Patrick Kuga

### Phase II

Erin Maker, Rob Carson

### Policy and Permitting

Chelsea McGimpsey, Reid Bogert

### Stormwater Capture and Use

Jim Rasmus, Joseph Draper

### Training

Dave Mercier, Jeff Condit

### True Source Control

Sara Toyoda, Vicki Kalkirtz

## Join CASQA

CASQA is a nonprofit corporation that advances sustainable stormwater management protective of California water resources. With well over 2,000 members, our membership is comprised of a diverse range of stormwater quality management organizations and individuals, including cities, counties, special districts, federal agencies, state agencies, ports, universities and school districts, wastewater agencies, water suppliers, industries, and consulting firms throughout the state. Collectively, CASQA represents over 36 million people in California.

Membership is open to all organizations and individuals who are interested in advancing sustainable stormwater management. Join now to be part of the collective voice and support [CASQA's Vision for Sustainable Stormwater Management](#). CASQA members have exclusive access to publications and work products to stay current on legislation and regulatory initiatives, as well as the six member-only subcommittees, event updates, and position opportunities with member organizations. If you are not a CASQA member, visit our Membership page to learn about the additional benefits of membership.



California Stormwater  
Quality Association®

BECOME A MEMBER

[casqa.org/membership](https://casqa.org/membership)

# Conference Subcommittee

## Co-Chairs

Andrea Crumpacker  
Tanya Bilezikjian

## CASQA

### Executive Director

Karen Cowan

### CASQA Events and Website Manager

Amy Porter

### Advance Booking

Chris Crompton

### Audio Visual

Jason Lawrence

### Advanced Media Works, Inc.

### Exhibitors

Karen Ashby

### Field Tour

Chris Ogaz  
Melanie Sotelo

### Graphic Design

Wendy Reynolds

### Networking Event

Brittany Waddell  
Kristina Hysler

## Registration

April Krieg

## Sponsors

Tom Lawrence

## Technical Program

Brenda Ponton  
Sharon Gosselin

## Welcome Reception

Katie McCoy  
Meaghan Wagner  
Michelle Hoalton  
Stephanie Gaines

## Abstract Reviewers

Adrian Montoya  
Aldo Licitra  
Andrew Sidor  
Andy Rodgers  
Ann Fletcher  
Bonnie de Berry  
Brian Currier  
Chris Sommers  
Christian Carleton  
Christopher Ogaz  
Cynthia Gabaldon  
David Pohl  
Dylan Ahearn

Elizabeth Zernik  
Erica Warren  
Erin Maker  
Fred Gonzalez  
Fulbert Chan  
Gabrielle Soto  
Geremew Amenu  
Hawkeye Sheene  
Heather Merenda  
Janet Rodriguez Livesey  
Jeff Skinner  
Jeremy Burns  
Jerry Bradshaw  
Jian Peng  
Jill Bicknell  
Jim Rasmus  
Jim Scanlin  
John Bliss  
Joseph Draper  
Kadi Whiteside  
Kathleen McGowan  
Kathy Grant  
Kelly Westover  
Laura Carpenter  
Lisa Sabin  
Lisa Skutecki  
Lucy Cortez-Johnson  
Matt Yeager

Matthew Frazier  
Maureen Kerner  
Megan Otto  
Mehran Ebrahimi  
Melanie Sotelo  
Michael Drennan  
Michael Kolbenschlag  
Michele Miller  
Michelle Hoalton  
Michelle Mattson  
Nikolas Aquino  
Paige Brue  
Raina Dwivedi  
Rebekah Guill  
Rinta Perkins  
Rob Carson  
Roshan Christoph  
Sandeep Bhonsle  
Shawn Kenney  
Stephanie Gaines  
Summer Bundy  
Tom Lawrence  
Wayne Rosenbaum  
Yvana Hrovat

## Friends of CASQA

Are you #CASQATOgether? Do you support the work of CASQA and our mission for sustainable stormwater management? If so, we invite you to become a Friend of CASQA.

Friends of CASQA was established to provide an avenue for individuals to show their support and contribute to our programs. As CASQA is a nonprofit organization, your \$100 contribution is tax deductible. We will include a year-to-date listing of our Friends of CASQA in the Annual Conference program and a calendar-year listing in the Annual Report.

### Thank you to our current 2023 Friends of CASQA!

Blanca Hoffmeier  
Brian Currier  
Cathleen Garnand  
Craig Snell  
Cynthia Gabaldon  
Ewelina Mutkowska  
Jeff Endicott  
Jian Peng  
Karen Cowan  
Kim Williams  
Richard Watson  
Rick Sidor  
Rob Carson  
Roshan Christoph  
Sharon Gosselin

**BECOME A FRIEND OF CASQA**

[casqa.org/about/friends-of-casqa](https://casqa.org/about/friends-of-casqa)

# Gullywasher

## We Offer More Than Our Competition

Unparalleled Stormwater Solutions for Today and Tomorrow!

### ✔ More Compliant Stormwater Results For Now and For the Future:

Our cutting-edge technologies ensure your business remains compliant with environmental regulations. Enjoy peace of mind, knowing your stormwater management is efficient, environmentally friendly, and future-proof.

### ✔ More Real Estate Available For Your Business Operations:

Say goodbye to bulky, space-consuming stormwater infrastructure. With Gullywasher's space-saving designs, you'll have more room for expansion, new ventures, or simply a more pleasant work environment.

### ✔ More Sustainable Process Designs:

At Gullywasher, sustainability is at the core of what we do. Our innovative stormwater treatment processes are designed to harmonize with industrial operations while saving you money in the long run.

### ✔ More Profit Being Generated Due to Less Stormwater Maintenance:

Watch your profits soar as Gullywasher's low-maintenance systems reduce costly downtime and repairs. Our systems can be used by anyone, no chemistry degree required, unlike some of our competitors. Invest in the future of your business with our practical and reliable solutions.

### Metal Compliant Filter Inserts



### Dual Stage Upflow & Downflow Biofilters



### Detention/Retention Pond Metal Compliant Curtain Barriers



### Vault Type Biofilters



**For unbeatable stormwater treatment technologies and a compliant future, choose Gullywasher today!**

Contact us at [info@gullywasher.com](mailto:info@gullywasher.com) to discover how we can transform your stormwater management and push your business into stormwater compliance.



CREATING A SUSTAINABLE  
CALIFORNIA BY BUILDING A  
RESILIENT WATER SUPPLY



## Designed and built with longevity, safety, and maintenance in mind

- Flat floor makes maintenance simple and fast
- No interior walls - exit point is always visible
- Open interior design allow proper ventilation
- Module heights from 3' - 14'
- Nothing to step over or duck under
- Watertight or soil tight configurations
- Filtered infiltration ports protect infiltration capacity
- HS-20 Rated with 10' of earth cover



Pre-Con Products  
240 W Los Angeles Avenue  
Simi Valley, CA 93065  
(805) 527-0841



Pre-Con Products provides engineered infrastructure products to last a lifetime.



Stormwater Solutions that Keep California Water Resources Clean

Runoff Reduction • Bioretention • Trash Capture • Detention  
Low Impact Development • Green Infrastructure



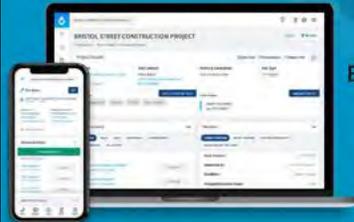
Contech Engineered Solutions LLC  
www.ContechES.com | 800.338.1122



STORMWATER COMPLIANCE SOFTWARE



Visit us at Booth 47!



Empower your team to complete tasks more quickly and accurately by digitizing your stormwater program

STORMWATER MANAGEMENT SIMPLIFIED

www.cloudcompli.com - info@cloudcompli.com



Stormwater Compliance



Pipeline Assessment



Pipeline Maintenance



Pipeline Rehabilitation



Pump Station Maintenance



UV CIPP Liners



Underground Utility Repairs



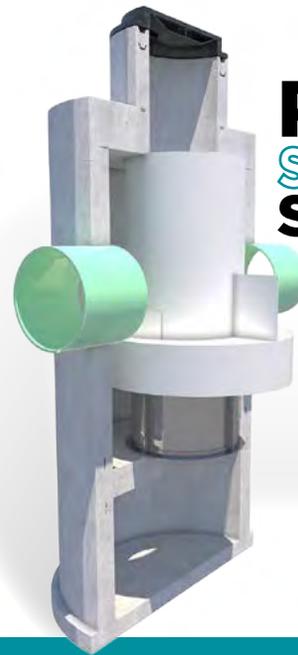
Flow Monitoring



Emergency Response

Servicing California | Arizona | Idaho | Oregon | Washington

www.downstreamservices.com  
San Diego International Airport



PROVEN  
STORMWATER  
SOLUTIONS



Our Experience Fuels Your Project's Success

Learn More At Booth 28

jensenprecast.com

775-440-2025

# See You Next Year!

CASQA 2024 Annual Conference  
SAFE Credit Union Convention Center  
Sacramento, CA



Courtesy of SAFE Credit Union Convention Center

## TRASH CAPTURE SOLUTIONS

StormTrap's trash removal solutions combine the natural energy of the water's flow with disposable mesh nets or baskets to capture and easily remove trash, floatables and solids from stormwater and wastewater.

- Certified by the California State Water Resources Control Board as a Full Capture/ High Flow Capacity Trash Devices

TrashTrap®



SiteSaver



[STORMTRAP.com](http://STORMTRAP.com)  
1-877-867-6872

**Need a reliable partner who will  
JUST HANDLE IT?**

**STOP BY BOOTH #41**

for more info on **Stormwater Maintenance and  
StormTek Full Trash Capture Devices** and more!

Or check us out at

[www.SWIMSCLEAN.com](http://www.SWIMSCLEAN.com)  
**866-967-9467**



**STORMPRISM  
SPEQ**  
www.stormprism.com/speq/

CREATING A SUSTAINABLE CALIFORNIA BY BUILDING A RESILIENT WATER SUPPLY

**Designed and built with longevity, safety, and maintenance in mind**

- Flat floor makes maintenance simple and fast
- No interior walls - exit point is always visible
- Open interior design allow proper ventilation
- Module heights from 3' - 14'
- Nothing to step over or duck under
- Watertight or soil tight configurations
- Filtered infiltration ports
- HS-20 Rated with 10' of earth cover



www.preconproducts.com

Pre-Con Products  
240 W Los Angeles Avenue  
Simi Valley, CA 93065  
(805) 527-0841

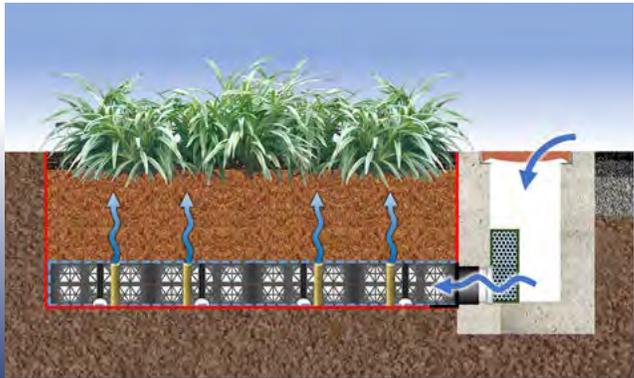
Pre-Con Products provides engineered infrastructure products to last a lifetime.

Visit us at Booth 14



**permovoid**

**Collect • Clean • Store • Re-Use**



**Explore Capillary Irrigation**



abt drains.com

f y t i in www.moleaer.com

**MOLEAER**  
ADVANCING NANOBUBBLE TECHNOLOGY

**PROACTIVE STORMWATER MANAGEMENT**

Target the Root Cause to Help Reduce Algae, Foul Odors and Pathogens with Nanobubble Technology

- ✓ Increase dissolved oxygen
- ✓ Reduce H<sub>2</sub>S formation and odors
- ✓ Increase sediment ORP
- ✓ Reduce coliforms like E. coli



**EMERGENCY STORMWATER TREATMENT**

Deploy Nanobubble Technology When and Where You Need It for Rapid Treatment

- ✓ Fast and easy deployment
- ✓ High-capacity systems for any size project
- ✓ Rentals and service programs available



Copyright ©2023 Moleaer. All trademarks stated herein are the property of their respective company. All rights reserved.



**PACE**  
Advanced Water Engineering

*in partnership with nature...*

**Water Resource Engineering Solutions**

- ◆ Innovative Water/Wastewater Treatment
- ◆ Practical Conveyance & Collection Infrastructure
- ◆ Multi-Functioning Water Resource Management
- ◆ Progressive Watershed Management
- ◆ Creative Recreational Water Design

714.481.7300 | WWW.PACEWATER.COM | CONTACTUS@PACEWATER.COM

# Mark Your Calendar: October 21-23, 2024

CASQA 2024 Annual Conference  
SAFE Credit Union Convention Center  
Sacramento, CA



Courtesy of SAFE Credit Union Convention Center

## Complete Our Conference Survey

### We Value Your Feedback!

Thank you for your participation in the CASQA 2023 Conference. The subcommittee invites you to complete a survey. Your feedback will enable us to improve our conferences and better meet your needs.



To access the survey, scan the code on the right, or go to:  
[www.surveymonkey.com/r/CASQA2023](http://www.surveymonkey.com/r/CASQA2023)



**CASQA 2023 Annual Conference**  
California Stormwater Quality Association  
1201 N. Catalina Avenue #4227, Redondo Beach, CA 90277  
[www.casqa.org](http://www.casqa.org)